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BROWN'S Seed Catalogue

1914

TWENTY-NINTH ANNUAL EDITION

ALFRED J. BROWN
SEED COMPANY

GRAND RAPIDS,



MICHIGAN

ALFALFA

The King of All Crops on the Farm

The Alfalfa campaign that was put on last spring in Western Michigan seems to have converted many farmers in the belief that Alfalfa should be grown on every farm. We had the pleasure of several personal interviews with Professor Holden during the time the campaign was going on in Kent County, and learned a whole lot about Alfalfa. We found out where to get the seed that is best adapted to our climate, and other information which you will find in this catalogue, as well as a little booklet on Alfalfa, which we shall be pleased to send free of charge.

Anticipating a large demand for high grade, hardy Northern Grown dry land seed, we have laid in a big stock of it, which we were able to secure at very reasonable prices. This seed is from some of the best fields in Dakota and Nebraska, and is almost pure, or as pure as can be found. The Government test of this seed is 99.61% pure, and the Agricultural College, at East Lansing, Michigan, have reported a test of 99.86% pure. We are headquarters for Western Michigan on high grade Alfalfa, and shall be pleased to submit our prices and samples for your consideration. We urge our customers to place their orders at an early date, while they have an opportunity of securing such high grade seed at a low price. If not interested in Alfalfa, tell your neighbor we have the pure hardy seed which is suitable to our climate.

General Information to Customers

With the single exception of "Beans" we have been fortunate in harvesting a full crop of seeds of the best quality—consequently prices have been reduced on many kinds of seeds below the prices that prevailed a year ago.

Profitable farming or gardening depends very largely upon the quality of the soil, and cultivation, but seeds really play the most important part as to whether the farm or garden is a success or failure. No matter how fertile the soil or how thorough the cultivation, one is doomed to disappointment and failure if poor seeds are planted. Seeds to be good must not only "grow," but they must be well "grown." Field trials and expert knowledge is necessary to determine real value in seeds. The parent must be good or the offspring will be weak. We have had nearly thirty years experience in growing, handling and testing out seeds of all kinds and do not hesitate to say that our seeds are as good as can be found. They have a long record behind them of continued success, and when we say good seeds are "worth more," we might go farther and say they are worth "much more." We absolutely refuse to handle or send out any seeds that have not been tested and found of good germination. They have given the best of satisfaction for many years and we have thousands of satisfied customers.

GUARANTEE SHIPMENTS

We guarantee the safe arrival of all Seeds sent out by us, in the regular way. If miscarried or damaged enroute, we will duplicate your order, but we will not be held responsible for any Seeds sent by freight to "prepaid" stations where there is no railroad agent to take care of the goods on arrival. If Seeds are ordered forwarded to such stations, the purchaser must assume all risk of goods going astray or stolen.

SEEDS BY MAIL, EXPRESS OR FREIGHT

Seeds do not take parcel post rates. They require 1c for each two ounces, or 8c per lb. regardless of distance to any point in the United States or Canada. We pay postage on seeds by packet, ounce or quarter pound. For larger quantities by mail add 8c per lb. All seeds by express or freight are delivered to Express Office or Freight Depot, free of charge. In ordering Grass, Clover and all Agricultural Seeds add 22c each for grain bags. No charge for boxes used in packing small packages.

SPECIAL NOTICE

Buy our Seeds through your local dealer and insist upon getting them. If they can not be found in your home town, send direct, but always send with the order remittance, either P. O. Money Order, Bank Draft or Express Money Order if convenient, otherwise send cash by registered letter. This will insure prompt service in filling your order.

NON-WARRANTY

We guarantee all Seeds handled and sent out by us have been carefully tested as to vitality and you can depend upon them as far as the Seeds themselves are concerned, but as most failures with Seeds are due to causes beyond our control, we can not guarantee the crop. Failures in most instances are due to such contingencies as sowing too deep, too shallow in soil not adapted to their culture; cut worms that destroy the plants before they are hardly visible; chemical changes that destroy the vitality of the Seed before the plants are above ground. Therefore, we in common with other Seed houses, give no warranty express or implied as to description, purity, productiveness or any other matter, of any Seeds we send out, and we will not in any way be responsible for the crop. If the purchaser is not willing to accept our Seeds on these terms and conditions, they are to be returned at once and the money paid for same will be refunded. If our customers will only stop to consider this matter, they will know that it is always to our best interests to send out only such Seeds as will give entire satisfaction.

Burpee's Stringless

Green Pod



It combines unusual hardiness, extreme earliness, and wonderful productiveness with pods of handsome appearance and finest quality. Extra early plantings may be made to produce the earliest crop, and even with later plantings BURPEE'S "STRINGLESS" is the quickest to produce pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. Combined with the extra hardiness and early maturity, the pods are the finest in quality, of a rich green, very round and straight, five inches long, solidly meaty and broad—deeply saddle-backed, caused by the rounded swell of the fleshy sides. The pods are tender, brittle, and of finest flavor, always entirely stringless even when fully matured.

BEAN CULTURE

CULTURE—There is nothing that responds more readily to good cultivation and soil than beans. We advise fall plowing to insure the best results. The land that is best adapted to beans is medium rich, well drained loam, which has been fertilized for a previous crop. As the plant is sensitive to both cold and wet, they should not be planted until the ground has become dry and warm. While the largest returns are obtained from planting in drills from two to three feet apart, good results may be had from planting in hills two feet apart each way. In this way the crop may be kept clean at less expense. It is not necessary to give the bean crop deep cultivation. If the ground is kept clean up till the time of blossoming, and the season favorable, success is sure. It is detrimental to the crop to cultivate after beans begin to set, as it will cause them to blast and injure the crop to a large extent.

LONGFELLOW

ROUND POD GREEN STRINGLESS BEAN
OF UNEXCELLED QUALITY



LONGFELLOW BEANS

One of the best round podded green stringless beans for the home garden and becoming a favorite among market gardeners. This bean has grown into favor for several years and will soon be known as one of the standard varieties. The pod is of a beautiful soft green color 6 to 8 inches long, straight and round. The vines are very prolific and produce a great profusion of these elegant long straight pods of delicious flavor. The plants grow to a height of 15 to 16 inches. It is an early ripening variety, about six weeks from time beans are planted until they are fit for the table.

IMPROVED GOLDEN WAX



IMPROVED GOLDEN WAX BUSH BEAN.
The Standard Flat, Wax-Podded Variety.

Among the Yellow Wax-podded or "Butter" Beans, the Golden Wax has long been in popular favor, but this Improved variety by far surpasses the old favorite in several desirable points. The plants are of vigorous, bushy growth, not susceptible to rust, moderately, early and very prolific. The pods are exceedingly handsome, large, uniformly broad, thick and almost of solid flesh, of good quality, tender and brittle, absolutely without string or coarse fibre at all stages until maturity, while the color is of a rich golden-yellow. Although not the earliest dwarf wax bean, its reliability in producing a heavy crop of large handsome pods, whether planted in spring, summer or early fall, renders it highly valuable for both home and market planting.

DWARF GOLDEN WAX

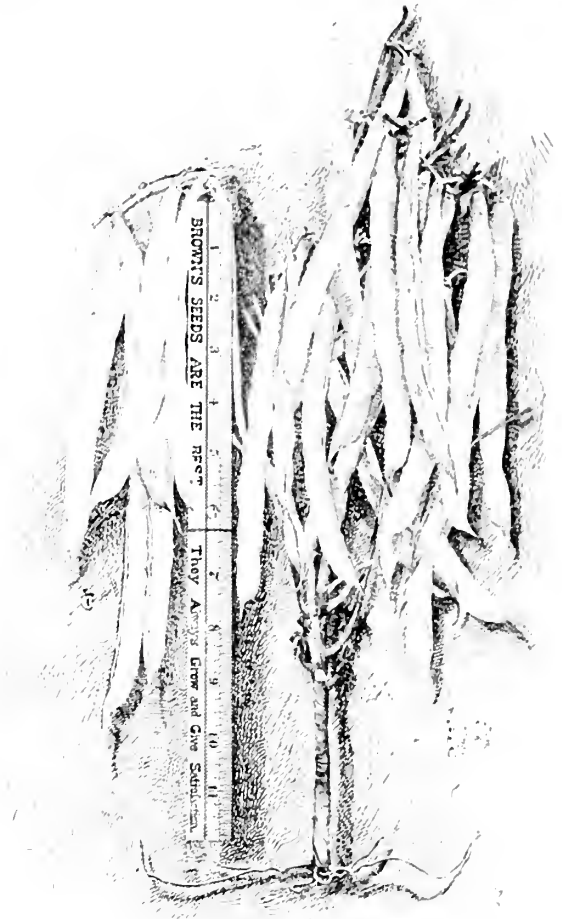


DWARF GOLDEN WAX.

This bean was introduced by the D. M. Ferry Co., a great many years ago and was known among the trade for many years as "D. M. Ferry Co.'s Golden Wax." It is now known as "Old Fashioned Golden Wax" and there is still some demand for this variety, although preference is now given to the Improved Golden Wax or Detroit Rust Proof Wax. The pod is flat and broad and quite fleshy of golden yellow. Fairly productive and of good flavor.



EUGENE DAVIS.



DAVIS KIDNEY WAX.

DAVIS KIDNEY WAX BEANS

Originated by Eugene Davis, the Father of the Grand Rapids Forcing Lettuce and originator of the Davis perfect cucumber. The first four bushels of these beans sold at \$62.50 per bushel. The following year one firm paid us one thousand dollars for 25 bushels or forty dollars a bushel.



A TWENTY ACRE FIELD DAVIS KIDNEY WAX.

Introduced by us in 1892, and now widely grown throughout the United States and Canada. Very hardy and enormously productive.

The plant is strong and vigorous, carries the pods well to the center of the plant and so high that many are seen above the foliage. The seed is pure white, kidney shaped and excellent for baking. Pods are waxy-white, long, straight and handsome. A great favorite with market gardeners and southern shippers as well as canners.



HISTORY

of the

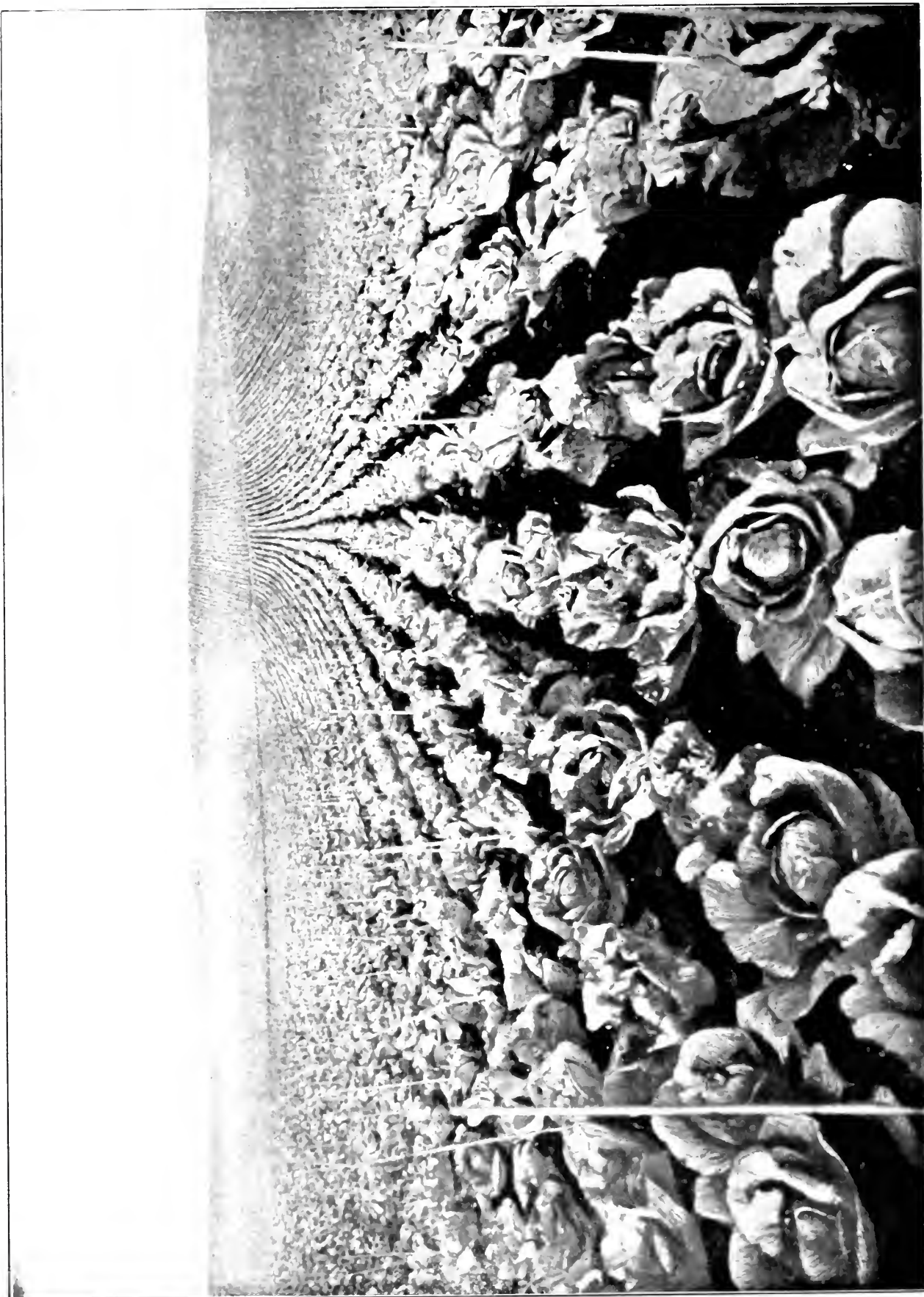
Lima Bean



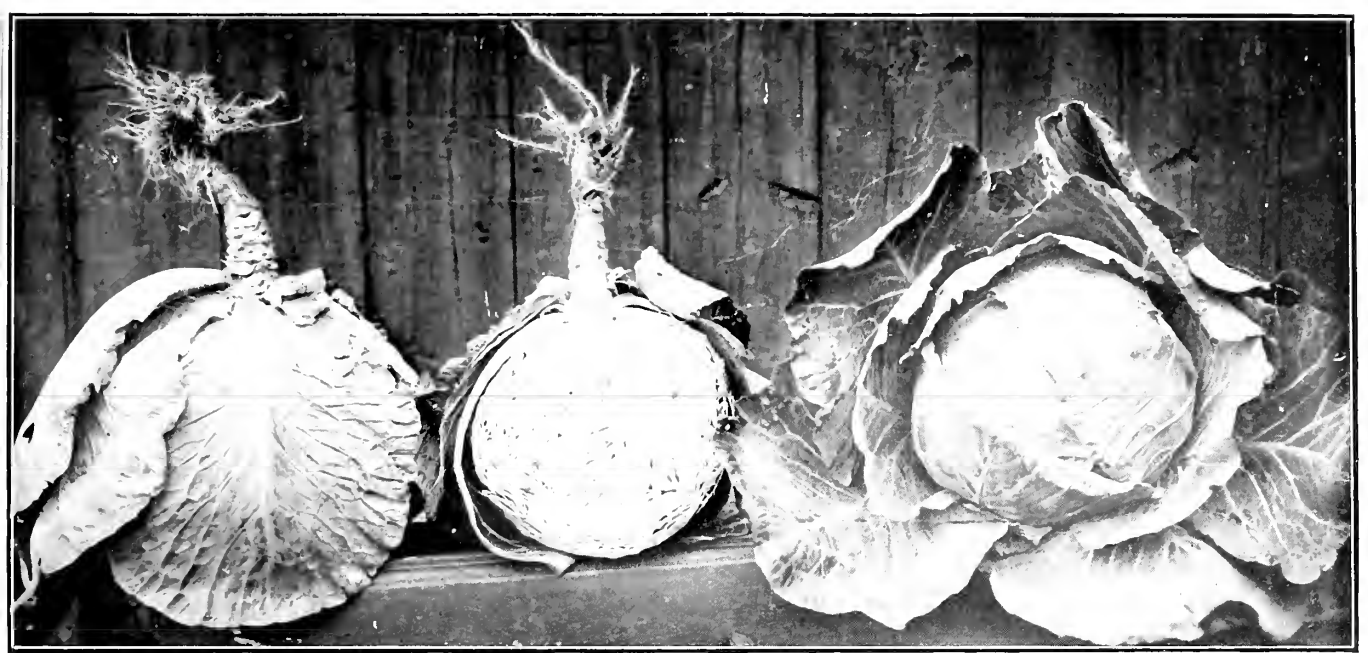
PHASEOLUS LUNATUS MACROCARPUS BENTH.

(The Large Lima.)

Linnaeus believed that this bean was of African origin and classed it as a separate species. It is now understood to be of South American origin and probably gets its name from the City of Lima in Peru. Extensively grown in this and other warm countries for green-shell and dry-shell purposes. Those of the potato type are more productive, more vigorous, and of better quality. Plant perennial in the South, grown as an annual in the North, vigorous grower, climbing or dwarf; leaflets large, ovate or ovate-lanceolate, thick, stiff, slightly pubescent, dull green; pods large, 3 to 6 inches long, 1 to 1 1/4 inches broad, flat, frequently twisted, point or spur very short or wanting; seeds very large, usually very flat and reniform (the potato type quite turgid and subreniform), variously colored. It differs from the Sieva type chiefly being a perennial (in the South), in making a larger growth, in being less hardy, later in season, and in having larger leaves and pods. Many strains, differing chiefly in season and size of pod, are in cultivation. The type of many of these modified forms is not well fixed and, for this reason, it is difficult to make accurate description and comparison.



55-ACRE FIELD OF DANISH BALLHEAD CABBAGE grown for seed. The plants marked with stakes are selected for stock seed. Our Danish Seed has given the best of satisfaction for many years past and has proven beyond a question of doubt to be far superior as to solidity and excellent keeping quality as well as sure headers.



COPENHAGEN EARLY MARKET

This is the latest Danish Production of an Early Round Headed Solid Cabbage which has attained the highest achievement in Cabbage breeding. It is the Earliest large round headed Cabbage yet introduced. The heads are of exceptional large size for so early a variety. It is a short stem plant of vigorous and compact growth, with few outer leaves. Matures about the same time as the Wakefield variety. Every plant seems to form a perfect tightly folded head, averaging in weight from five to eight pounds. The heads are round, very solid and of especially good quality. It is by far the Earliest Round Summer Cabbage of recent introduction and we recommend it most highly. Market Gardeners growing Early Cabbage for the market should not fail to grow this variety.



DANISH ROUNDHEAD
OR HOLLANDER



RED CABBAGE
ODENSE MARKET STONEHEAD



DANISH BALLHEAD
Tall Stemmed
Long Keeping
Winter



Photograph View of a field of true Snow Ball Cauliflower going to seed.

M. Topp.

TRUE SNOWBALL



CAULIFLOWER

We import direct from Denmark the finest strain of Snowball Cauliflower to be had. For many years our seed has given the best of satisfaction, and as proof we might mention the statement of one of our customers who told us he sold a little over \$200.00 worth of cauliflower raised from one ounce of our seed. The dwarf compact habit and small number of leaves makes it the ideal cauliflower to grow for profit. It is not only a sure header, but the heads are of compact growth and snow white.

Such flower always command the highest prices and meets with ready sale.

Special Notice—To large cauliflower growers, who are not already our customers, we will be glad to furnish free sample for trial.

Davis Perfect Cucumber



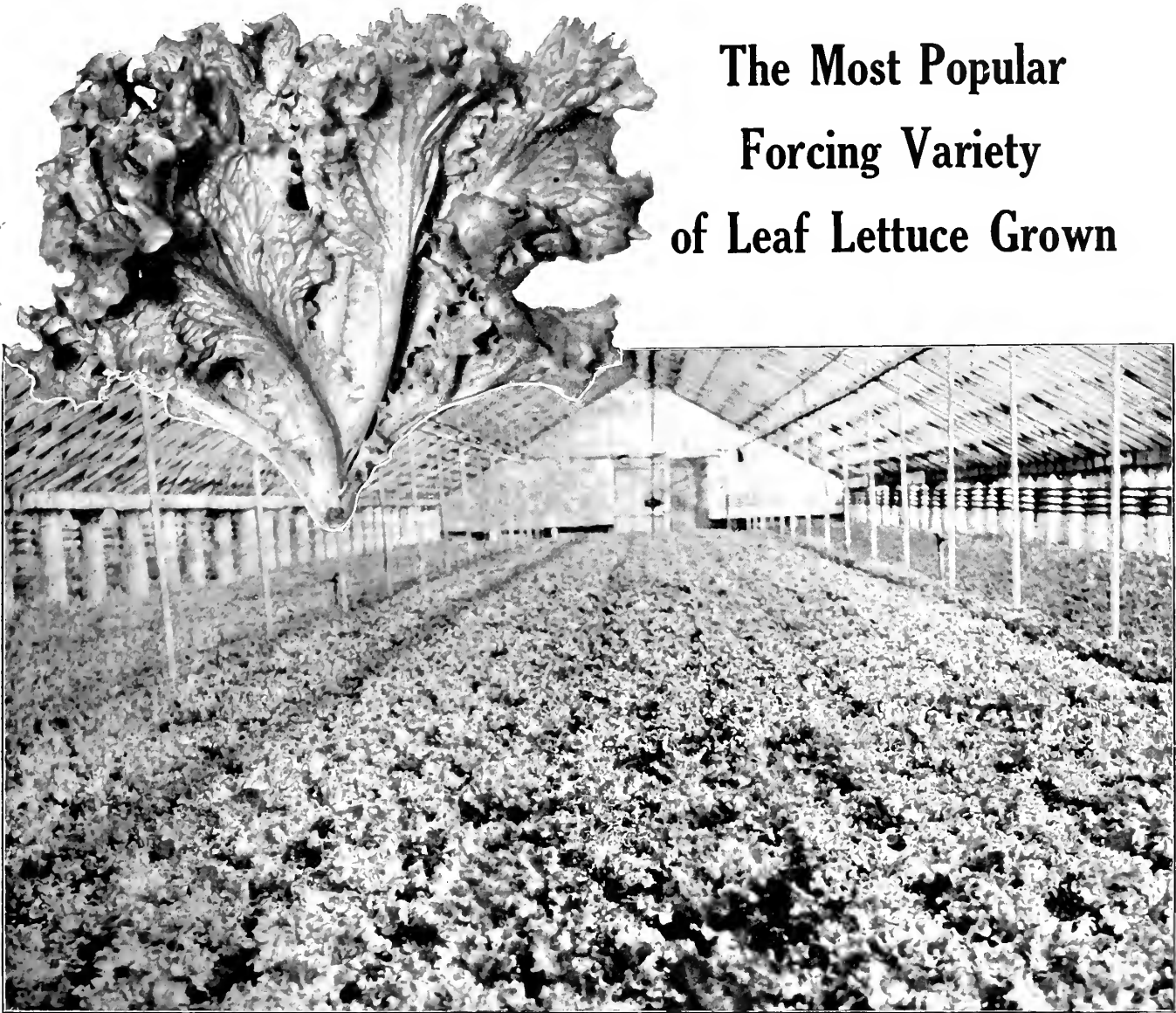
Originated by Eugene Davis and introduced by us in 1906. Now recognized by expert cucumber growers everywhere as being the best cucumber for forcing under glass or growing out doors.

Habit of growth vigorous and should not be planted as close together as other White Spine sorts. Fruit very dark, glossy, green; shape slim and symmetrical; average length about ten inches. Exceedingly crisp and tender, and seem to hold their color and freshness long after being cut. Not quite as early as some of the White Spine varieties, but will out-yield any of them and will sell when others are a drag on the market. The only cucumber for market gardeners to grow for profit, and the best for the home garden.

For the past four years, with the aid of the Originator, we have by careful selection been able to produce an excellent improved type of this splendid variety but having only a small quantity of seed saved from these selected types we can not offer it in quantity of more than four ounces. Per Packet, 15c, per ounce \$1.00, four ounces \$3.00.

Grand Rapids Forcing Lettuce

**The Most Popular
Forcing Variety
of Leaf Lettuce Grown**



Photographic View of Half a House of Grand Rapids Forcing Lettuce Grown by the Originator, Eugene Davis

The Grand Rapids forcing lettuce that has become so famous was originated more than thirty years ago by Eugene Davis, well known to the Seed trade as the originator of the Davis Kidney Wax Bean, and Davis perfect cucumber. For years this famous variety of lettuce was carefully secluded by local lettuce growers before any one would part with even a pinch of seed. The first ounce of seed was sold to a Cincinnati grower for fifty dollars. Shortly afterwards the seed was sought for in many lettuce growing markets at extreme high prices and for many years this variety has been grown successfully, and to-day is the most popular forcing variety of leaf lettuce grown. Thousands of tons are grown and shipped to the largest markets in the United States annually. The seed we offer is from select stock furnished us by the originator, and we have been growing it carefully for several years, selecting only such plants that are true to type, until we have the best stock of this seed to be found.



Rocky Ford

The Most Famous Muskmelon

The Rocky Ford has proven to be the most valuable muskmelon in cultivation.

Its size, shape and quality has made it the most popular muskmelon grown. It resembles the old fashioned netted gem, but is more oval in shape. The vines are vigorous, bearing an enormous amount of fruit. Hundreds of carloads are shipped every season from Colorado to all of the principal markets of the United States and Canada.

The color of the skin is a rich greenish gold. The flesh is very deep, and ripening clear to the rind. It is very solid and the meat is thick and luscious in flavor and leaves a small vacancy for the seed.

Our seed is grown for us at Rocky Ford, Colorado, by one of the most reliable growers.



Watermelon

COLE'S EARLY

It is by far the best of the early Water Melons for growing in the Northern States.

It is early and very sweet. Not so large as some varieties, but what lacks in size is made up in its productiveness. The vines are very vigorous and productive, so that the yield per acre compares very favorably with the later varieties.

The flesh is a fine, red color, crisp, melting and sweet. Our seed of this variety, being northern grown, makes it a desirable melon to grow in this vicinity.



Paul Rose

The Paul Rose Muskmelon produces a higher percentage of high quality table melons, than any other variety (except the Rocky Ford grown under irrigation).

This melon is a hybrid between the Osage and Netted Gem, combining the best points in both parents. It has the thick reddish salmon flesh, the firmness and cheesy structure of the Osage; the netting and shape resemble the Rocky Ford and the rich flavor is distinctly its own. Ripens ten days earlier than the Osage. is a perfect basket melon, does not break down in shipping.

VAUGHAN'S ORIGINAL OSAGE

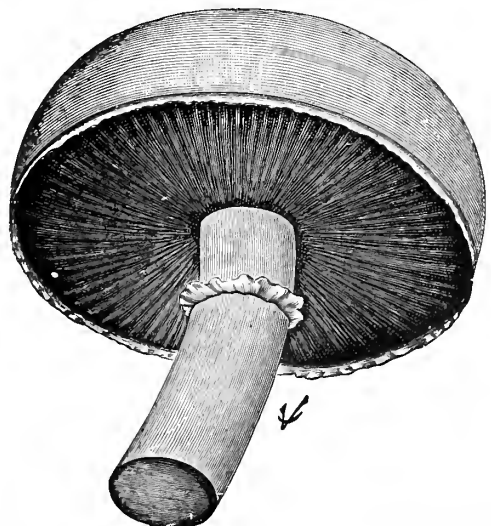
The melon is known in all markets by name, on the bills of fare of many leading hotels and prominent restaurants in the largest cities of the United States. It is distinct, quite large, probably three times the size of the ordinary (Netted Gem), and has a deep salmon flesh which is of a peculiar cheeselike texture. The melon holds its good flavor in nearly all its fruits much better than most kinds, that is, a well-grown Osage Melon is seldom poor in quality, while many Gems and other types are found flat and insipid when cut, although the melons themselves appear to be all right. The Osage is well liked everywhere and each year finds an increased demand for Vaughan's type from consumers in the hotels and restaurants where melon buyers and users are most critical. Our type has a rather dark skin and moderately netted as shown in the illustration. The rich orange flesh is extremely thick and of finest flavor.



MUSHROOMS

Mushrooms can be grown in any dark room or cellar, where the temperature can be maintained at 50 degrees to 60 degrees. From old pasture procure the soil and store it away. To one bushel of this soil add two bushels of fresh horse manure. Of this well mixed compound prepare a bed, say four feet wide. Put down a thin layer and pound it down hard, and go on until you have a bed eight inches thick. It will soon become quite hot but let the heat recede until it is only 85 or 90 degrees. Then make holes, say a foot apart, and put in the spawn, two or three pieces as large as a walnut in each hole. Cover the holes and press the soil solid and smooth. Let the bed remain in this condition about twelve days; then cover it with two inches of fresh loam, and over this place four or five inches of hay or straw, and the work is done. If the temperature is right, in six or eight weeks you may expect Mushrooms. The bed will continue bearing from twenty to thirty days. After the first crop is gathered, spread over the bed an inch of fresh soil, moisten with warm water, and cover with hay as before. Success is not always certain with the amateur, and is usually to be attained only after more or less experience. One pound of spawn is enough for a bed 3 x 6 feet.

GARDEN CITY, pure culture, per lb., 15c; 10 lbs., \$1.25.



ONIONS

Onion growing for profit depends so much upon good seed that any one engaged in the business cannot afford to take chances on seed they cannot depend upon. For years the finest quality of onions have been produced from our seed, and the best testimonials we can offer is the hundreds of satisfied customers in Michigan, Indiana and Ohio, the greatest onion producing states in the union. Our stock onion bulbs are carefully selected and re-selected, and our crops, for seed, are grown under the greatest care, by men of long experience in onion seed growing. Our field trials have proven beyond a possible doubt that the seed we offer is as good as any to be found anywhere. You may pay more for seed than we ask, but you cannot find better quality.



A bushel of Southport Red Globe onion bulbs, the type we use for producing our choice seed.



TRUE SOUTHPORT RED GLOBE



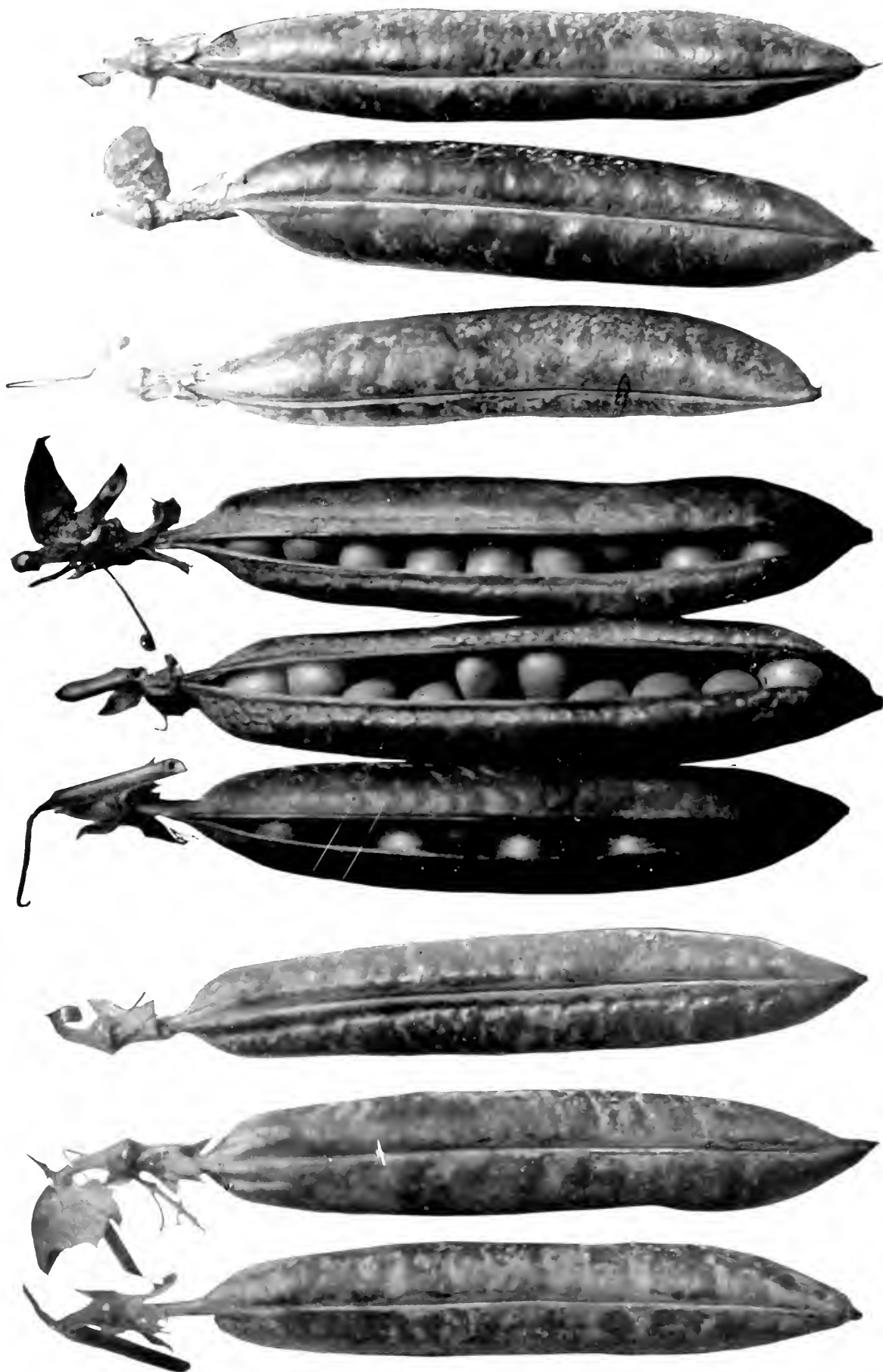
TRUE MICHIGAN YELLOW GLOBE



Schell's New Quality Pepper

We are sure you will be interested in this New Pepper. It is without question the most valuable variety ever offered the market gardener. It is tremendously prolific, the plant photographed contained thirty-eight perfect peppers. It has a beautiful attractive shape, which makes it sell on sight, while its superior quality (Almost as sweet as an apple) backs up its attractive appearance. As to size, it averages five inches in length, three and one-half inches wide at the stem end, and two and three-fourths inches at the other. This New Quality Pepper was originated by Mr. Herman Martin, Harrisburg, Penna., who, with all other gardeners in that vicinity, have been growing it as their best crop for a number of years.

GARDEN PEAS

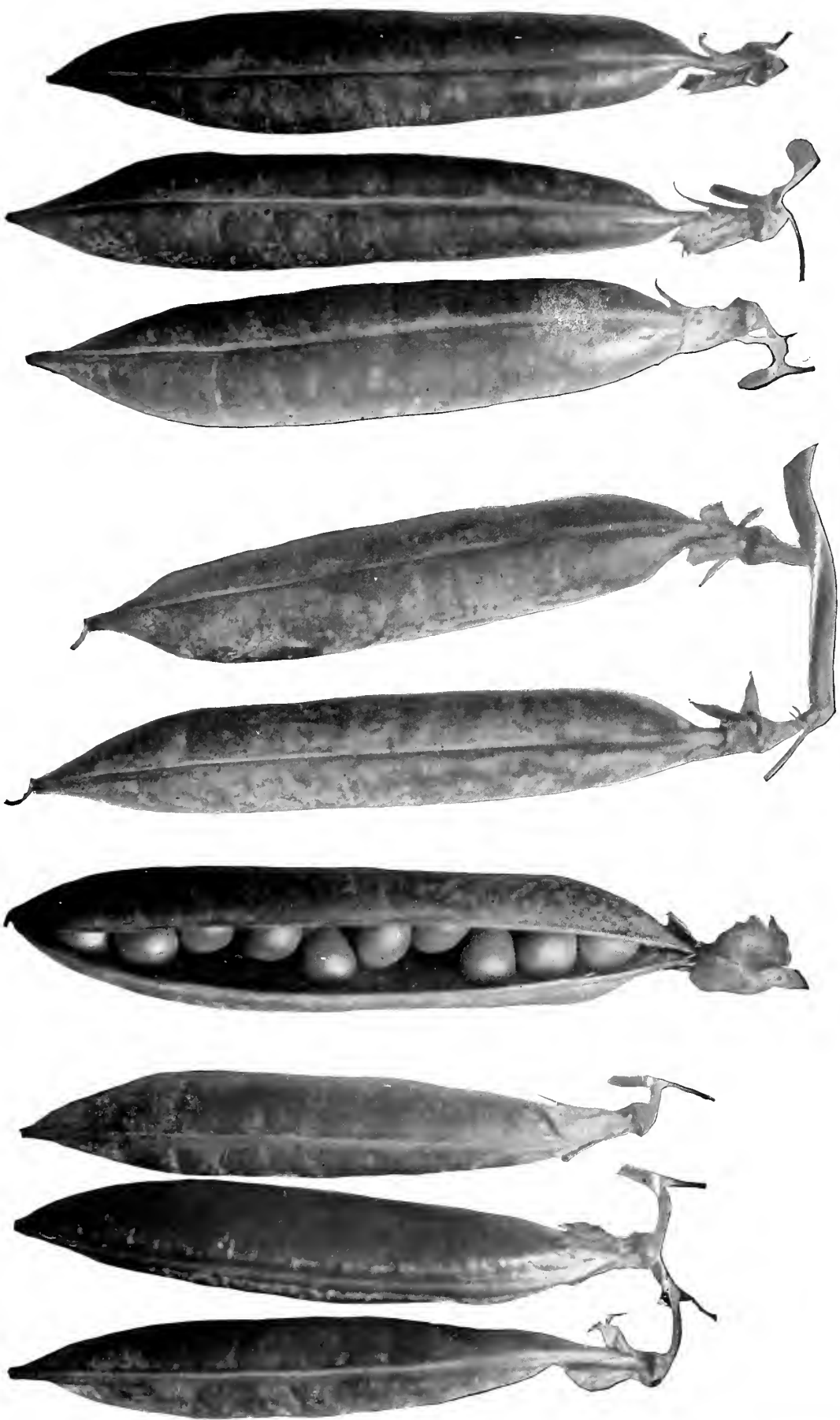


ALDERMAN

GRADUS OR PROSPERITY

THOMAS LAXTON

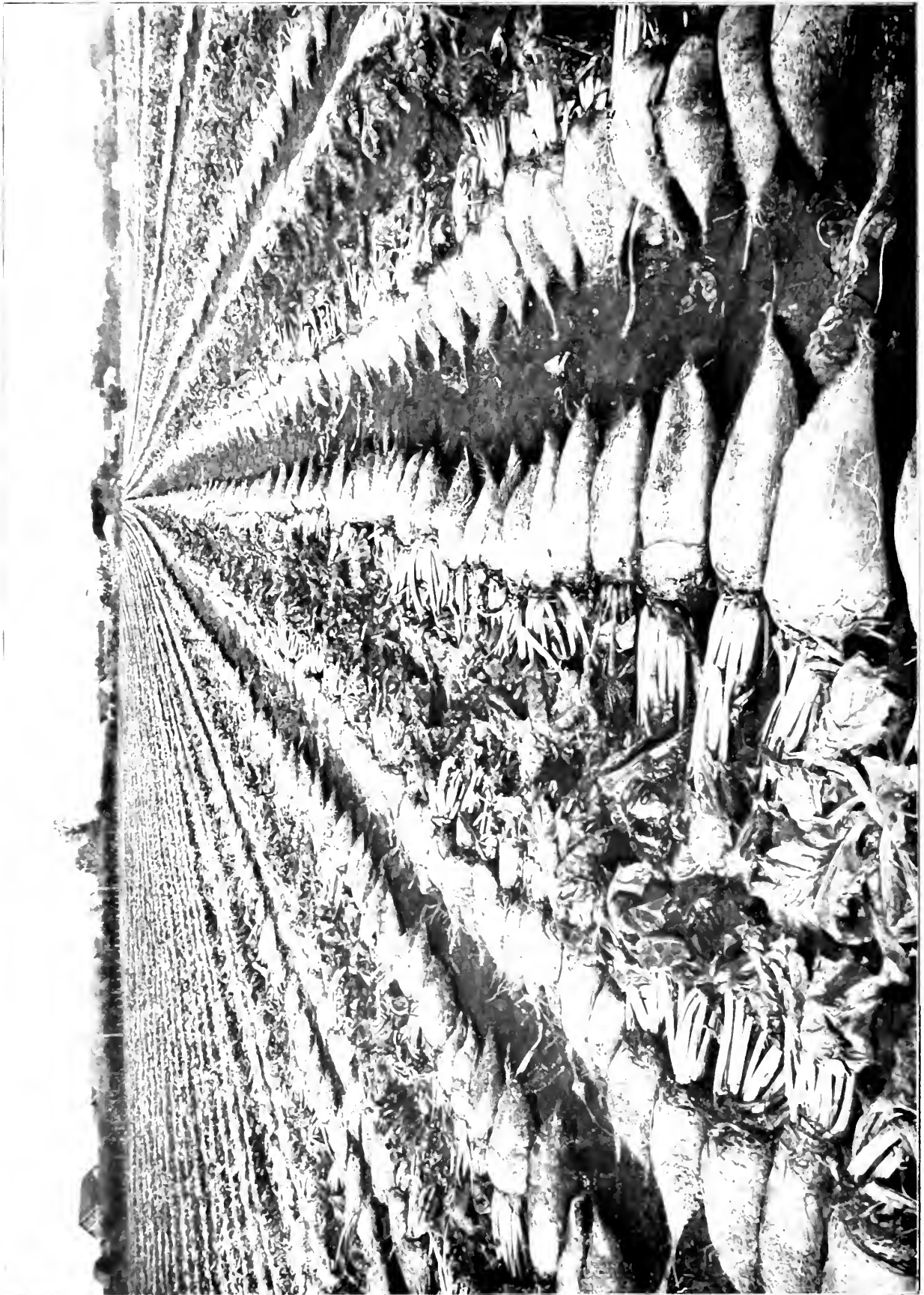
GARDEN PEAS



TELEPHONE

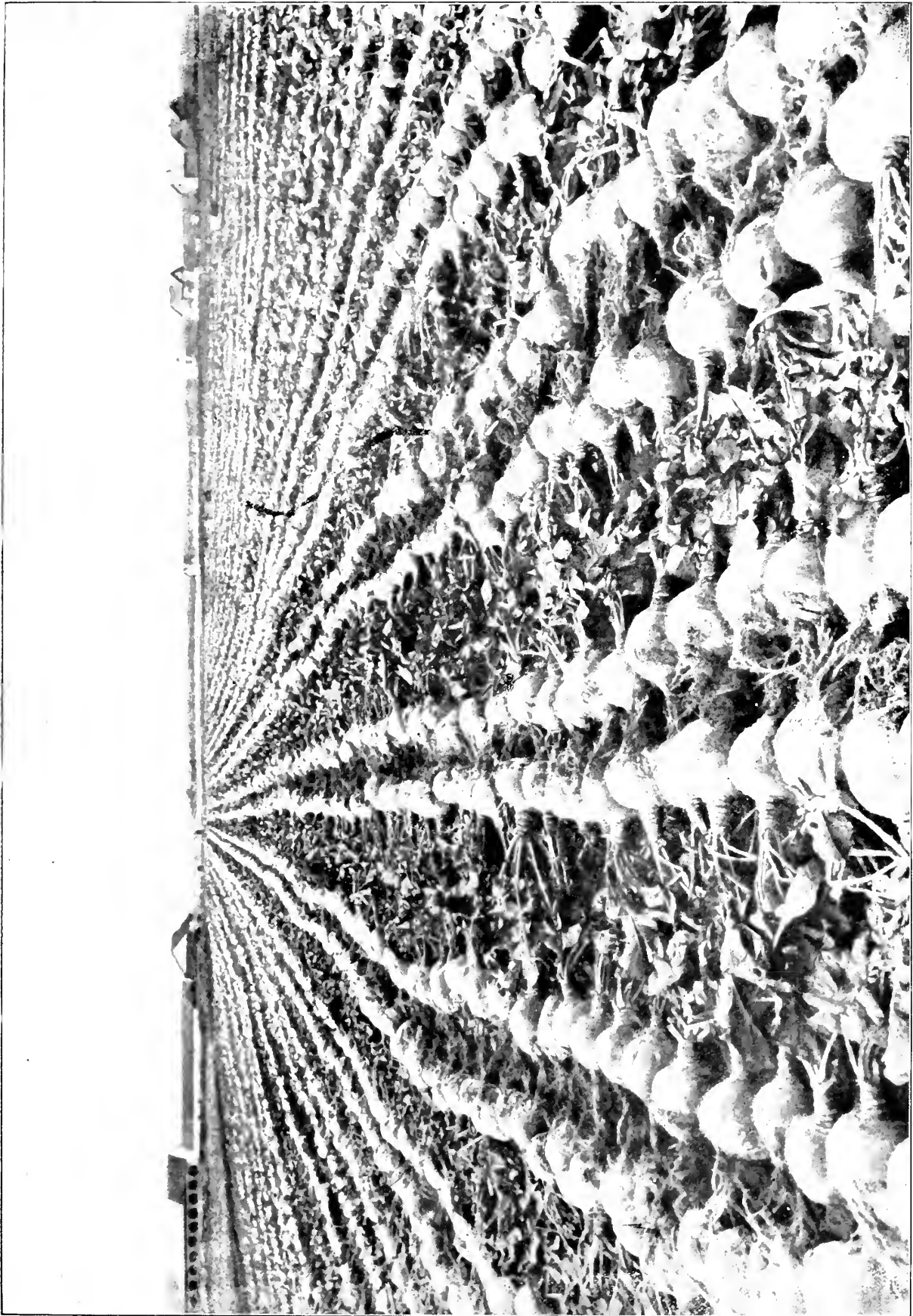
IMPROVED STRATAGEM

YORKSHIRE HERO



FIELD OF STOCK ROOTS OF MANGEL—DANISH SLUDSTRUP.

This is the best of all Mangels. The color is reddish yellow, the type distinct, and it contains a larger per cent. of nutriment than found in any other variety. Very hardy. Grows well above the ground and is easily pulled.



RUTABAGA BANGHOLM

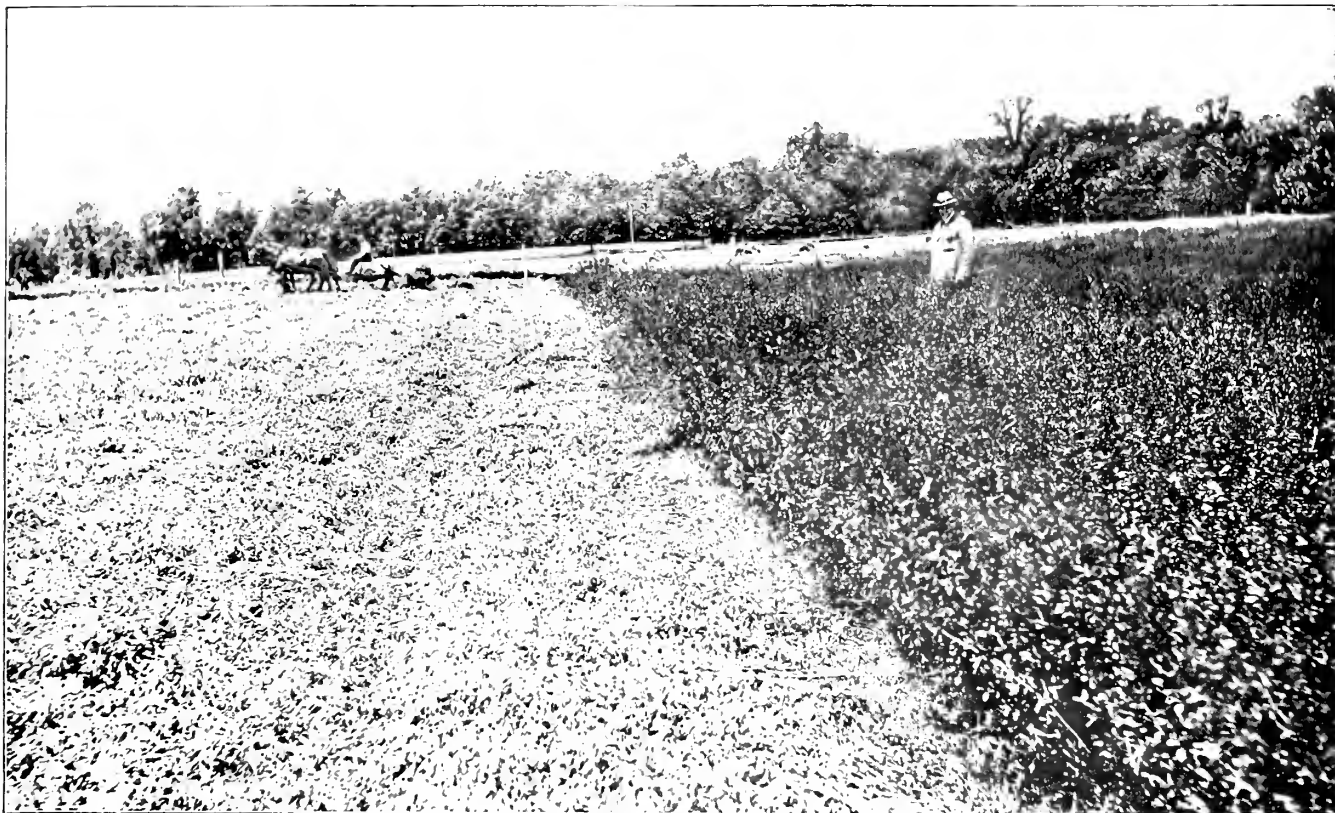
This Rutabaga is the finest and best of all introductions. The color is yellow, with dark purple head, the shape globular, the form symmetrical. It is a quick grower and a very heavy cropper.



TURNIP, "DANISH BORTFELDER" OR IMPROVED COW HORN

This splendid turnip has been awarded first premiums by the Danish government. It is the most productive of all turnips and is considered the best in Scandinavia. Long root, cream color, delicate green top, rapid grower, heavy cropper, and excellent keeper. Should be sown in the spring for summer use and in the middle of summer for winter purposes. Especially adapted for Michigan.

ALFALFA VIEWS



Photograph views taken on Annadale Farm in Wyoming township, Kent County. These photos were taken the latter part of June, 1912, when the Alfalfa was in full bloom. One can judge its dense growth by the figure taken in the photograph. Alfalfa is now recognized by all dairymen as being the most valuable crop on the farm.





HAIRY VETCH AND RYE GROWING TOGETHER

To grow for a crop of seed, early fall sowing is most desirable, say any time from the middle of July until the middle of September. When sown in the fall, the plant will make some growth before winter sets in, but the following spring a marvelous growth will develop and the crop will be in full bloom early in June, ripening seed by the middle or latter part of July.

Hairy Vetch is especially adapted for poor, light, sandy soil and can be grown successfully either for feeding or for plowing under as a fertilizer. If grown on good potato or corn land, it develops a tremendous crop. If sown in the fall, the following summer the first crop of green feed can be cut about the first of June, and, if not cut too close, as many as three crops can be cut in one season.

As a cover crop for orchards, the Vetch is rapidly growing in favor. Sow in July or August, and if the weather is favorable, a very satisfactory crop will be obtained to mulch the soil when winter sets in.

QUANTITY OF SEED REQUIRED PER ACRE

Hairy Vetch is usually sown with rye or oats and 40 lbs. of seed is required to the acre. If sown in the spring, sow with oats. If in the fall, sow with rye.

SPRING VETCH.

Spring Vetch is an annual and should always be sown in the spring with small grain at the rate of 60 pounds of seed to the acre. The seeds of Spring Vetch are somewhat flattened and grayish in color and larger than seeds of Hairy Vetch, which are more round in shape and black. (See illustrations showing size and shape.) Common or spring vetch requires fairly good soil to succeed, while Hairy Vetch is less particular and grows well in poor soil, especially sandy land. Spring Vetch will not grow in alkali soil nor is it drought resistant, while Hairy Vetch will stand considerable alkali and much drought.

Vetches should not, as a rule, be sown in rotation with wheat, as they tend to volunteer and the seed is very difficult to separate from wheat. If grown in rotation with wheat they should not be allowed to mature seed, but where this is done they should be followed by a cultivated crop before wheat is again planted.

HAIRY OR WINTER VETCH

ALSO KNOWN AS
SAND VETCH.

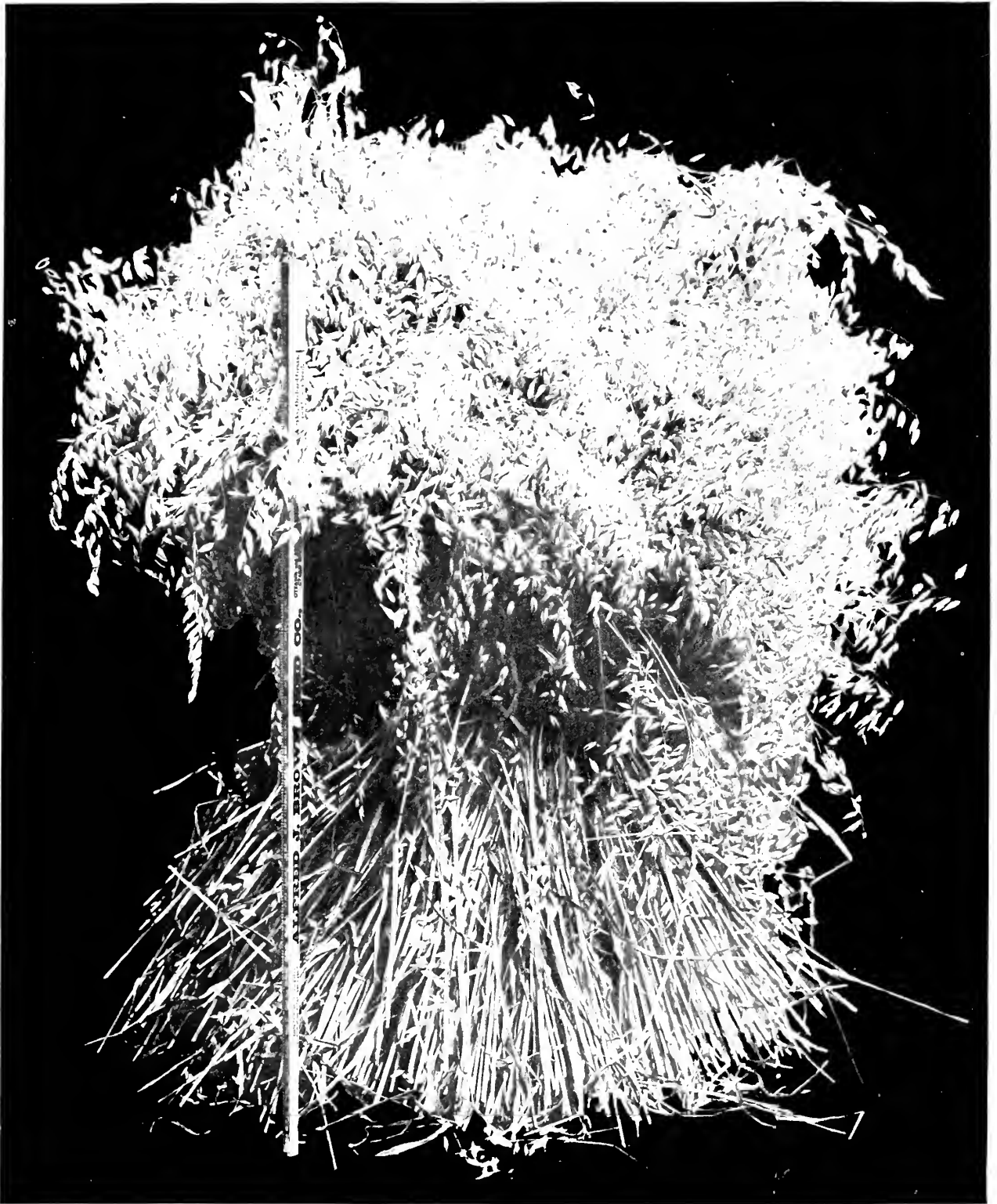
HISTORY AND DESCRIPTION.

This valuable legume is a native of Western Asia, and was introduced in 1874. It is cultivated extensively in Germany, Russia and France. It is known in Germany as "Sand Zottel" or "Winterwicke." The plant is a branching climbing vine, many of its branches attaining a length of from 8 to 10 feet. The blossoms are a beautiful bluish purple, growing in clusters, and the plant as well as the seed resemble sweet peas. Not until recent years has the Department of Agriculture at Washington, D. C., called attention to the great value of this plant, and it is surprising the recognition it received from the farmers and fruit growers in Michigan.

CULTIVATION.

If sown in early spring and conditions are favorable, the plant will develop rapidly and will be in full bloom by the middle of August and will continue to grow and remain green until the ground freezes in the winter.

SEEDS OF SPRING VETCH
NATURAL SIZE.SEEDS OF HAIRY VETCH
NATURAL SIZE.A SINGLE PLANT OF HAIRY
OR WINTER VETCH

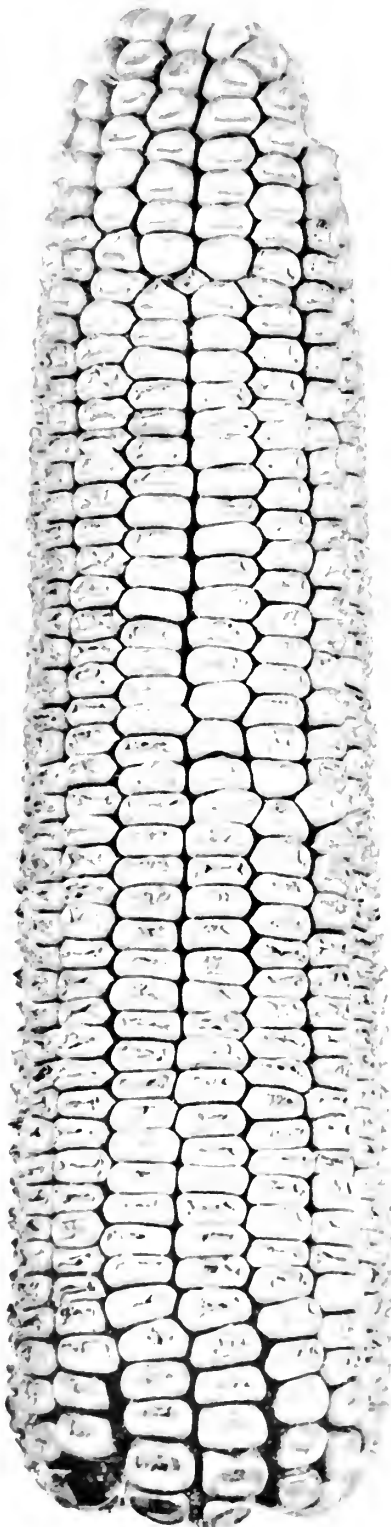


True Swedish Oat

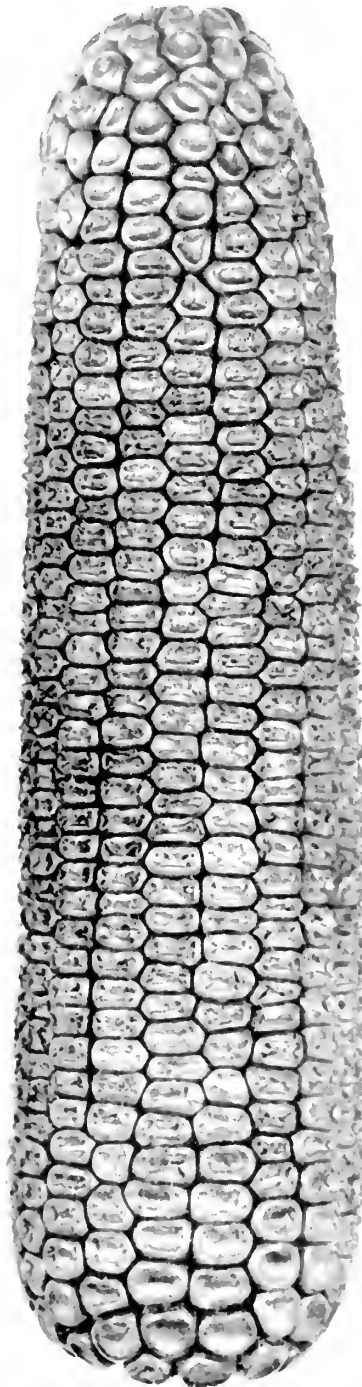
True Swedish Oat "regenerated" and unquestionably the best Oat for the Michigan Farmer. Ripens early on a good stiff straw and out yields all other oats.

CORN

Success in corn growing is due largely to the seed planted. Corn of low vitality, or ill bred corn should never be planted. Corn fit for seed purposes should show a germination vitality of 90% or better. Low vitality corn when planted will show defective hills from 25 to 33 $\frac{1}{3}$ % per hill. Therefore it would be better to feed such corn and plant only such that you know to be of strong germination. Farmers should test their corn before planting and be sure that it will grow. We do not send out any corn except that which has been thoroughly tested as to vitality. Furthermore we do not offer anything but Northern Grown Corn, suitable for our climate. One can better afford to pay a good price for seed that can be depended upon than to plant Corn of questionable character.



MICHIGAN WHITE DENT.



MICHIGAN YELLOW DENT.



PRIDE OF THE NORTH.



RED COB ENSILAGE CORN.



Our genuine Red Cob Ensilage corn is far superior to common Red Cob Fodder corn. It will produce considerable more tons of green fodder to the acre. None genuine unless it has the trade mark stenciled on the bags. It was about 15 years ago when we first introduced the corn to the dairymen and farmers of Western Michigan. Since then the demand has gradually increased.

One bushel of this corn has been known to produce fifty tons of green fodder to the acre.



CRIMSON CLOVER.

Crimson or Scarlet Clover

Crimson Clover is an annual and is grown largely in the Southern and Southeastern states. Ten or fifteen years ago, it was introduced to the Michigan farmer, and while it is not grown extensively in this state, it has met with considerable favor. Seed should be sown at the rate of fifteen lbs. to the acre, and may be sown among corn at the last cultivation and it will produce good fall pasturage. As the plant gathers nitrogen, a crop turned under makes a very valuable fertilizer.

WHITE SWEET CLOVER

(*Melilotus alba*.)

White Sweet Clover or Bokhara Clover, as it is also called, is a hardy biennial plant, erect and branching in growth. It starts up very early in the spring and in its second year it reaches a height of from 5 to 12 feet, blooms, matures its seed and dies. However, there is usually enough seed scattered to reseed and the crop is continuous unless cut before the seed ripens. When young, the plants resemble Alfalfa very closely. Sweet Clover has a peculiar bitter taste and the flowers and leaves a sweet vanilla-like odor, by which it is easily distinguished.

It seems to grow in all climates and with little regard to the character of the soil. It is found growing in gravel-pits, heavy clay soils and sometimes in almost pure sand. Nor is it particular as to moisture. It stands more dry weather than Alfalfa, yet is often found growing in low wet soils.

It sends its roots to a great depth. It is a legume like Red Clover and Cow Peas and like these plants, has the faculty of extracting nitrogen from the air and storing it up in the roots, thus fertilizing the soil for the use of succeeding crops.

It is a valuable forage crop; while some animals refuse it at first because of its peculiar taste and odor, they soon learn to like it and thrive on it. In food

value it does not differ greatly from Alfalfa. The crop may be pastured closely and there is little danger of bloating. For hay it should be cut just as it is coming into bloom and is handled in much the same way as Alfalfa. A second cutting can usually be secured 40 to 60 days later, if not pastured. It is also used to some extent as an ensilage crop, put into the silo and fed successfully in this way.

It is an excellent plant for bee pasture, as it blooms continuously from June to October. It is not troublesome in cultivated fields and can usually be destroyed by mowing when in full bloom.

The seed may be sown on the bare ground during the winter, with spring grain crops during March, or on well prepared ground during April and May. It requires a firm seed bed with just enough loose soil on top to cover the seed. About 25 lbs. of clean hulled seed is required for an acre.

YELLOW ANNUAL SWEET CLOVER.

(*Melilotus indica*)

This is a distinct sort, much smaller in growth and lasts only one year, and should not be confused with the White.

FIELD PEAS

FOR DAIRY COWS AND HOGS.

Equal To Corn and Six Weeks Earlier.

Can be sown separately in drill, or broadcast, $2\frac{1}{2}$ to 3 bushels to the acre, or with oats $1\frac{1}{2}$ bushels to the acre.

The Field Pea does not succeed in the hot climate of the Southern States, but does well in the North, and on any soils adapted to oats or spring wheat.

Cut and feed green, or, if for hogs alone, can be used as pasture.

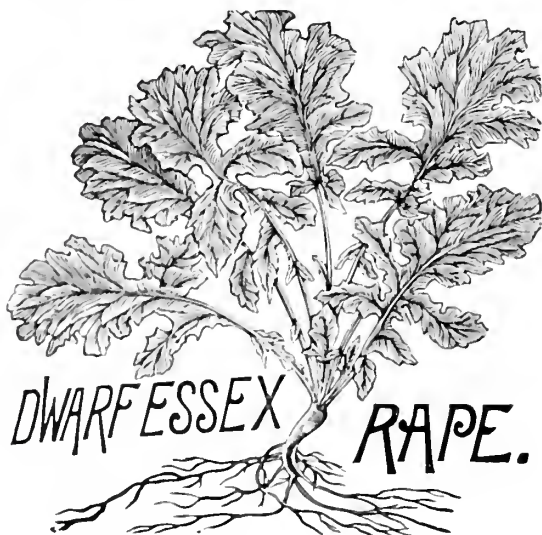
They have been grown by dairymen with very sat-

isfactory results, following winter rye, which was cut green in June for dairy cows, then stubble turned under and sown to mixed peas and oats, furnishing a large amount of forage in August, when grass pasture is usually short, and producing a supply of milk as abundant as in early summer months.

As a fertilizer they come next to clover, to be plowed under when they commence to blossom. They will grow on land that will not produce clover.

DWARF ESSEX RAPE

This plant is extensively grown for forage, especially for sheep and for green manure, for which purpose there is perhaps no better plant adapted



where a quick, rank growth is desired. Farmers who raise much stock and desire to get young cattle, sheep and lambs into favorable condition to be sold advantageously in the fall, can do it most cheaply by growing this Rape. Prepare the ground as for turnips and sow in June or July, with a turnip drill, in rows $2\frac{1}{2}$ feet apart, at the rate of 3 pounds of seed per acre, or broadcast at the rate of 6 pounds to the acre.

SOIL REQUIREMENTS—For its best development rape requires a rich, moist, loamy soil and will usually do well on any but light sandy soils and stiff clays, such soils being usually deficient in vegetable matter. In general, a soil that will produce good crops of turnips, cabbages, wheat and corn will be suitable for rape.

EXTENT OF CULTIVATION—Rape is best adapted to rather cool moist climates, such as prevail in portions of Canada and the Northern United States. It can, however, be successfully grown as a forage crop in many of the warmer and drier sections. In the South it may be grown as a fall or winter forage. In favorable seasons, or with a small amount of irrigation, excellent crops of rape are grown in Wyoming, Montana, the Dakotas and Michigan, and many instances are on record where good crops have been produced without irrigation, under conditions of drought so severe as to cause the failure of corn and other farm crops.

COW PEAS

A valuable and nutritious Green Forage or Hay Crop. Enriches poor land; improves good land.

One of the best and most economical ways of improving the soil is the plowing under of a leguminous crop. COW PEAS have been found superior for this purpose, making one of the largest yielding and most

nutritious crops known, while as a soil improver they are invaluable. They will grow on any soil that is not wet or cold, and especially on soils medium or light.

Like Clover, they absorb Nitrogen from the atmosphere, and the roots, reaching deep into the soil, bring up the necessary Potash, thus making a complete and natural fertilizer. The COW PEA has power greater than any other legume to extract the nitrogen or ammonia from the atmosphere and store same in the vines and roots, so that even if the crop is cut off, the land is enriched and improved by the roots. From 5 to 9 tons of green fodder to the acre have been produced. There are about fifty known varieties of Cow Peas, but only a few extensively cultivated. The use to be made of the crop by the grower should determinate largely which variety to select. For forage purposes the most desirable are those which have a fairly upright habit of growth, grow to a large size, hold their leaves well and produce an abundance of pods.

The Whippoorwill variety is perhaps the most widely cultivated, and it may be considered the standard of all Cow Peas. It is suitable for hay or grain production. It makes a vigorous growth, is fairly erect and still produces a large amount of vine. The seed is mottled chocolate on a buff or reddish ground color.

The Early Michigan, or Michigan Favorite is perhaps the best variety for producing seed and in some sections of the state it is cultivated altogether.

The New Era is the smallest seeded of all the Cow Peas that have found a wide use. The seed is bluish in color. The plant is the most erect of all Cow Peas, rarely having any prostrate branches. It is early and produces a large crop of seed.

For hay, sow from one to one and one-half bushels to the acre. For seed, sow one-half to three-fourths bushels to the acre.



COW PEA PLANT—SHOWING RIPE PODS

SOJA OR SOY BEAN

The Soja Beans are fast taking the place of clover in sections where the soil is not the most fertile both for hay and fertilizing purposes. Recommended as one of the best leguminous plants for soil restoring, as it is adapted to all soils. It is a sure cropper. Unsurpassed for hay, claimed to be superior to clover or timothy. Ordinary yield of beans 25 to 40 bushels per acre. They are one of the richest of natural stock foods. Plant in May, for it takes about 90 days to mature the seed. For hay, sow about 1 bushel per acre, either broadcast or drilled. Cut when in blossom. For seed, sow in drills about 12 inches apart in the

rows and have the rows about 30 inches apart. For seed sow from 8 quarts to a half bushel.

The Southern Yellow Soy or Soja Bean is grown in Michigan to some extent, but it is grown for fodder and hay purposes exclusively. The season not being long enough to mature the crop.

The best varieties for Michigan are the Black Beauty yellow Hollybrook and Early Blacks. The seed of the Black Beauty, being so small, requires only eight quarts of seed to the acre. Nuttall closely resembles the Black Beauty. Both varieties will mature seed in Central Michigan, and we can most highly recommend these varieties.

Vegetable Price List

ASPARAGUS

	Oz.	1 1/4 Lb.	Lb.
Columbian Mammoth White.....	\$0.05	\$0.15	\$0.50
Conover's Colossal.....	.05	.15	.50

ASPARAGUS ROOTS

One Year Old, per 100.....	\$0.75
Two Year Old, per 100.....	1.00
(Special prices on 1,000 Roots and upwards.)	

BEANS, DWARF WAX SORTS

	Qt.	Pk.	Bu.
Davis Kidney Wax.....	\$0.30	\$1.75	\$6.50
Wardwell's Kidney Wax.....	.30	1.75	6.50
Dwarf Golden Wax.....	.30	1.75	6.50
German Black Wax.....	.30	1.75	6.50
Pencil Pod Black Wax.....	.30	1.75	6.50
Currie's Rust Proof.....	.30	1.75	6.50
Improved Golden Wax.....	.30	1.75	6.50
Michigan White Wax.....	.30	1.75	6.50

BEANS, DWARF GREEN PODDED

Burpee's Stringless Green Pod.....	\$0.35	\$2.00	\$6.50
Extra Early Red Valentine.....	.30	1.50	5.50
Extra Early Refugee.....	.30	1.50	5.50
Refugee or Thousand To One.....	.30	1.50	5.50
Dwarf Horticultural.....	.30	1.50	5.50
Black Valentine.....	.30	1.50	5.50
Giant Stringless.....	.30	1.50	5.50
Longfellow.....	.30	1.50	5.50
Royal White Dwarf Kidney.....	.25	1.25	4.50
Large White Marrow.....	.25	1.25	4.50
Improved Red Kidney.....	.25	1.25	4.00
Improved Pea or Navy.....	.20	.90	3.25

LIMA BEANS

Burpee's Bush Lima.....	Sold out		
Burpee's Improved Lima.....	Sold out		
Henderson's Bush Lima.....	.35	2.00	7.50
King of the Garden.....	.35	2.00	7.50
Sieberts or Jersey.....	.35	2.00	7.50

POLE BEANS

London Horticultural.....	\$0.30	\$2.00	\$7.00
Dutch Case Knife.....	.30	2.00	7.00
Kentucky Wonder.....	.30	2.00	7.00
White Crease Back.....	.30	2.00	7.00

TABLE BEET

	Oz.	1 1/4 Lb.	Lb.
Fire Balls.....	\$0.10	\$0.25	\$0.75
Crosby's Early Egyptian.....	.10	.25	.60
Egyptian Extra Early.....	.10	.25	.60
Eclipse.....	.10	.25	.60
Early Blood Turnip.....	.10	.25	.60
Crimson Globe.....	.15	.25	.60
Edmonds Blood Turnip.....	.10	.25	.60
Detroit Dark Red Turnip.....	.10	.25	.75
Half Long Blood.....	.10	.25	.60
Long Dark Blood.....	.10	.25	.50
Swiss Chard.....	.10	.25	.60

SUGAR BEET FOR SUGAR MAKING

	Lb.
Klien Wanzleben.....	\$0.30
Vilmorin's Improved.....	.30

SUGAR BEET FOR STOCK FEEDING

	Lb.
Giant Half Sugar Feeding, Rose.....	\$0.30
Giant Half Sugar Feeding, White.....	.30
Lane's Imperial Sugar.....	.30
New Danish Sludstrup.....	.30

MANGEL WURZEL

Mammoth Long Red, Imported.....	\$0.30
Yellow Globe.....	.30
Golden Tankard.....	.30
Red Globe.....	.30

CABBAGE

	Oz.	1 1/4 Lb.	Lb.
Copenhagen Market.....	\$0.50	\$1.25	\$4.00
Early Jersey Wakefield.....	.20	.60	2.00
Large Wakefield Charleston.....	.20	.60	2.00
Early Winingstadt.....	.15	.40	1.40
Henderson's Early Summer.....	.20	.50	1.75
Fottler's Imp. Brunswick.....	.20	.50	1.75
All Seasons.....	.20	.60	2.00
Henderson's Succession.....	.20	.60	2.00
Early Flat Dutch.....	.15	.50	1.75
Premium Flat Dutch.....	.15	.50	1.75
Large Late Drumhead.....	.15	.50	1.75
Surehead.....	.20	.50	1.75
Danish Ball Head, Long Stem.....	.25	.75	2.50
Danish Ball Head, Medium.....	.25	.75	2.50
Hollander Finest Imported.....	.20	.75	2.50
Mammoth Rock Red.....	.20	.60	2.00

TABLE CARROT

	Oz.	1 1/4 Lb.	Lb.
Early Short Horn or Forcing.....	\$0.10	\$0.25	\$0.75
Early Scarlet Horn.....	.10	.20	.60
Danver's Half Long.....	.10	.20	.65
Chantenay Stump Rooted.....	.10	.25	.75
Guerrande or Oxheart.....	.10	.20	.65
Nantes, Half Long.....	.10	.25	.75
Long Orange.....	.10	.20	.60
Giant White Belgium.....	.10	.15	.40
Orange Belgium.....	.10	.15	.40
Improved Short White.....	.10	.15	.40

TRUE SNOW BALL CAULIFLOWER

Price, per Oz., \$1.50; 1 1/4 Lb., \$6.00; Lb., \$18.00

CELERY

	Oz.	1 1/4 Lb.	Lb.
Golden Self-Blanching French Grown.....	\$1.50	\$5.25	\$20.00
Golden Self-Blanching.....	.25	.90	3.00
White Plume.....	.20	.60	2.00
Dwarf White Solid, or Kalamazoo.....	.20	.60	2.00
Dwarf Golden Heart.....	.15	.40	1.50
Celeriac or Turnip Rooted.....	.15	.40	1.40
Celery Seed for Flavoring.....	.05	.15	.40
Celery, Soup or Cutting.....	.10	.25	.90

CRESS

	Oz.	1 1/4 Lb.	Lb.
Curled or Pepper Grass.....	\$0.05	\$0.15	\$0.40

CORN SALAD

	Oz.	1 1/4 Lb.	Lb.
Large Seeded.....	\$0.10	\$0.20	\$0.60

SWEET CORN

Put up by Measured Bushel.

	Qt.	Pk.	Bu.
Mammoth White Cory.....	\$0.20	\$1.00	\$3.50
White Cob Cory.....	.20	1.00	3.50
Early Minnesota.....	.20	1.00	3.50
Crosby's Early.....	.20	1.00	3.50
Perry's Hybrid.....	.20	1.00	3.50
Black Mexican.....	.20	1.00	3.50
Early Evergreen.....	.20	1.00	3.50
Stowell's Evergreen.....	.20	.90	3.25
Country Gentleman.....	.20	1.00	3.50
Golden Bantum.....	.25	1.25	4.50
Moor's Concord.....	.20	1.00	3.50
Burpee's White Evergreen.....	.20	1.00	3.50
Peep O' Day.....	.25	1.20	4.50
Adams' Early.....	.15	.85	3.25

CUCUMBER

	Oz.	1/4 Lb.	Lb.
Davis Perfect.....	\$0.10	\$0.20	\$0.70
Davis Perfect "Select".....	.25	.75	2.00
Early Frame or Short Green.....	.10	.20	.60
Early Green Cluster.....	.10	.20	.60
Arlington White Spine.....	.10	.20	.60
Improved White Spine.....	.10	.20	.60
Klondyke Long White Spine.....	.10	.20	.60
Evergreen White Spine.....	.10	.20	.60
Chicago Pickling.....	.10	.20	.60
Boston Pickling.....	.10	.20	.60
Improved Long Green.....	.10	.20	.70
Small Gherkin "For Pickles".....	.15	.30	1.00
Cool and Crisp.....	.10	.20	.60
Everbearing.....	.10	.20	.60

EGG PLANT

	Oz.	1/4 Lb.	Lb.
Improved New York Purple.....	\$0.30	\$1.00	\$3.50

ENDIVE

	Oz.	1/4 Lb.	Lb.
Moss Curled.....	\$0.10	\$0.30	\$1.00
Green Curled.....	.10	.30	1.00

SWEET HERBS

	Oz.	Lb.
Anise.....	\$0.10	\$0.80
Basil, Sweet.....	.10	1.25
Caraway, for Sowing.....	.10	.50
Dill.....	.10	.60
Fennel, Sweet.....	.10	.60
Horchound.....	.20	1.75
Lavender.....	.15	1.50
Majoram, Sweet.....	.15	1.25
Rosemary.....	.25	2.75
Rue.....	.25	2.75
Sage, Broadleaf.....	.10	1.10
Savory, Summer.....	.20	2.25
Thyme, English.....	.35	3.75

KALE OR BORECOLE

	Oz.	1/4 Lb.	Lb.
Tall Green Curled Scotch.....	\$0.10	\$0.20	\$0.50
Dwarf Curled Scotch or German Greens.....	.10	.20	.50

KOHL RABI

	Oz.	1/4 Lb.	Lb.
Early White Vienna.....	\$0.20	\$0.50	\$1.60
Purple Vienna.....	.20	.50	1.60

LEEK

	Oz.	1/4 Lb.	Lb.
American Flag.....	\$0.15	\$0.50	\$1.75

LETTUCE

	Oz.	1/4 Lb.	Lb.
Premium Cabbage.....	\$0.10	\$0.25	\$0.90
Early Curled Silesia.....	.10	.25	.80
Hanson.....	.10	.25	.75
Grand Rapids Forcing.....	.15	.30	1.00
Grand Rapids Forcing "Select".....	.20	.50	1.50
Early Tennis Ball.....	.10	.25	.90
Early Curled Simpson.....	.10	.25	.80
Black Seeded Simpson.....	.10	.25	.80
Prize Head.....	.10	.25	.90
California Cream Butter.....	.10	.25	.90
Big Boston.....	.10	.25	.90
May King.....	.10	.30	1.00
Early White Cabbage.....	.10	.25	.80
Brown Dutch.....	.10	.25	.80

MUSHROOMS

	Lb.	10 Lbs.
Garden City, Pure Culture.....	\$0.15	\$1.25

MUSK MELONS

	Oz.	1/4 Lb.	Lb.
Paul Rose.....	\$0.10	\$0.25	\$0.85
Rocky Ford or Netted Gem.....	.10	.25	.80
Osage.....	.10	.25	.75
Vaughan's Osage "Select".....	.20	.75	2.00
Hoodoo.....	.10	.30	1.00
Large Green Nutmeg.....	.10	.25	.90
Montreal Nutmeg.....	.10	.25	.90
Emerald Gem.....	.10	.25	.90
Grand Rapids Early Market.....	.10	.25	.90
Tip Top.....	.10	.30	.85
Bay View.....	.10	.25	.75

WATER MELONS

	Oz.	1/4 Lb.	Lb.
Sweetheart.....	\$0.05	\$0.15	\$0.50
Vick's Early.....	.05	.15	.50
Mountain Sweet.....	.05	.15	.50
Phinney's Early.....	.05	.15	.50
Cuban Queen.....	.05	.15	.50
Kolb Gem.....	.05	.15	.50
Peerless.....	.05	.15	.50
Round Light Icing.....	.05	.15	.50
Dark Icing.....	.05	.15	.50
Georgia Rattlesnake.....	.05	.15	.50
Citron (for Preserves).....	.05	.15	.50
Klackley's Sweet.....	.05	.15	.50
Dixie.....	.05	.15	.50

ONION SEED

	Oz.	1/4 Lb.	Lb.
Extra Early Flat Red.....	\$0.10	\$0.35	\$1.10
Large Red Wethersfield.....	.10	.35	1.10
Southport Red Globe (Select).....	.15	.50	1.50
Yellow Globe Danvers (Select).....	.10	.35	1.25
Michigan Yellow Globe.....	.10	.35	1.25
Yellow Strasburg.....	.10	.30	1.00
Yellow Danvers Flat.....	.10	.30	1.00
Southport Yellow Globe.....	.10	.35	1.25
Mammoth Prize Taker.....	.10	.35	1.25
Southport White Globe.....	.20	.60	2.00
White Portugal or Silverskin.....	.15	.40	1.50
Early White Queen.....	.15	.40	1.25
Mammoth Silver King.....	.15	.40	1.25
White Barletta.....	.15	.40	1.25

ONION SETS

Choice White.....	} Market Price. Ask for Prices.
Choice Reds.....	
Choice Yellows.....	

PEAS, EARLY SORTS

	Qt.	Pk.	Bu.
Extra Early.....	\$0.25	\$1.50	\$5.50
First and Best.....	.25	1.50	5.50
Alaska .....	.25	1.40	5.00
American Wonder.....	.25	1.75	6.00
Nott's Excelsior.....	.25	1.75	6.00
Sutton's Excelsior .....	.25	1.75	6.00
Gradus .....	.35	2.00	7.00
Thomas Laxton.....	.35	2.00	7.00
McLean's Little Gem.....	.25	1.75	6.00
Premium Gem.....	.25	1.75	6.00

PEAS, MAIN CROP SORTS

	Qt.	Pk.	Bu.
Telephone	\$0.25	\$1.75	\$6.00
Alderman .....	.25	1.75	6.00
Yorkshire Hero.....	.25	1.50	5.50
Stratagem .....	.25	1.50	5.50
Everbearing .....	.25	1.50	5.50
Champion of England.....	.25	1.50	5.50
Horsford .....	.25	1.50	5.50
McLean's Advancer.....	.25	1.50	5.50
Marrowfat .....	.20	1.25	3.25

PARSNIP

	Oz.	1/4 Lb.	Lb.
Improved Hollow Crown.....	\$0.10	\$0.20	\$0.50

PARSLEY

Champion Moss Curled.....	\$0.10	\$0.25	\$0.75
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PEPPER

Large Bell or Bull Nose.....	\$0.20	\$0.60	\$2.00
Long Red Cayenne.....	.20	.60	2.00
Chinese Giant.....	.30	1.00	3.50
Red Chili.....	.20	.60	2.00

PUMPKIN

Large Cheese.....	\$0.05	\$0.15	\$0.40
Sugar .....	.05	.15	.40
King of the Mammoths.....	.10	.25	.75
Connecticut Field.....	.05	.10	.30
Japanese Pie.....	.10	.25	.80

RADDISH

Vick's Scarlet Globe.....	\$0.05	\$0.20	\$0.60
Half Long Bright Scarlet.....	.05	.15	.45
Scarlet Turnip.....	.05	.15	.50
Scarlet Turnip White Tip.....	.05	.15	.50
Rosy Gem White Tip.....	.05	.15	.50
Cooper's Sparkler.....	.05	.20	.60
Early Round Dark Red.....	.05	.15	.40
Long Scarlet Short Top.....	.05	.15	.40
Wood's Early Frame.....	.05	.15	.40
French Breakfast.....	.05	.15	.40
Beckert's Chartier.....	.05	.15	.40
Philadelphia White Box.....	.05	.15	.45
White Strasburg.....	.05	.15	.45
Long White Vienna .....	.05	.15	.45
Leicle .....	.05	.15	.50
Chinese Rose or Scarlet China.....	.05	.15	.50
Long Black Spanish .....	.05	.15	.50
Round Black Spanish.....	.05	.15	.45
Crimson Giant .....	.05	.15	.50
Giant White Stuttgart .....	.05	.15	.50
California White Mammoth.....	.05	.15	.50

RHUBARB

Victoria	Per Lb.	\$1.00
Rhubarb Roots.....	Each	.10

SALSIFY

	Oz.	1/4 Lb.	Lb.
Mammoth Sandwich Island.....	\$0.10	\$0.30	\$1.00

SPINACH

	Oz.	1/4 Lb.	Lb.
Thick Leaf Summer.....	\$0.05	\$0.10	\$0.15
Victoria Long Standing.....	.05	.10	.15
Bloomsdale .....	.05	.10	.15

SQUASH, SUMMER VARIETIES

	Oz.	1/4 Lb.	Lb.
Mammoth White Bush.....	\$0.10	\$0.20	\$0.60
White Summer Crookneck.....	.10	.15	.50
Early Yellow Bush Scallop.....	.10	.20	.50
Early White Bush Scallop.....	.10	.20	.50
Yellow Summer Crookneck.....	.10	.20	.50

SQUASH, WINTER VARIETIES

	Oz.	1/4 Lb.	Lb.
Hubbard, True Select.....	\$0.10	\$0.25	\$0.70
Chicago Warty Hubbard.....	.10	.25	.80
Golden Hubbard.....	.10	.25	.80
Boston Marrow .....	.10	.20	.60

TOMATO

Livingston Globe.....	\$0.25	\$0.75	\$2.50
Earliana .....	.25	.75	2.00
Favorite .....	.15	.50	1.75
Beauty .....	.15	.50	1.75
Early Acme.....	.15	.50	1.75
Perfection .....	.15	.50	1.75
Stone .....	.20	.60	2.00
Chalk's Early Jewell.....	.20	.60	2.00
Dwarf Stone.....	.20	.60	2.25
Dwarf Champion.....	.20	.60	2.00
Matchless .....	.20	.60	2.00
Ponderosa .....	.35	1.00	3.50
Early Michigan.....	.15	.50	1.75
Plum Shape.....	.25	.75	2.50

TURNIP, WHITE FLESHED SORTS

Early White Flat Dutch Strap Leaf.....	\$0.05	\$0.15	\$0.40
Extra Early Purple Top Milan.....	.10	.20	.60
White Egg.....	.05	.15	.40
Early Purple Top Strap Leaf.....	.05	.15	.40
Purple Top White Globe.....	.05	.15	.40
Long White Cow Horn.....	.05	.15	.40
Sweet German.....	.05	.15	.40
Pomercanian White Globe.....	.05	.15	.40
White Norfolk.....	.05	.15	.40
Danish Bortfelder or Improved Cow Horn.....	.05	.15	.50

TURNIP, YELLOW FLESHED SORTS

Green Top Yellow Aberdeen.....	\$0.05	\$0.15	\$0.40
Yellow Globe.....	.05	.15	.40
Robertson's Golden Ball.....	.05	.15	.40

RUTABAGA OR SWEDES

American Purple Top.....	\$0.05	\$0.15	\$0.35
White Sweet Russian.....	.05	.15	.40
Monarch Tankard.....	.05	.15	.35
New Danish Daugholm.....	.05	.15	.50

PRICE LIST OF FARM SEEDS

PRICES SUBJECT TO MARKET CHANGES

CLOVERS

	Per Lb.	Per Bu.
Medium or June.....	\$0.25	Market price
Mammoth .....	.25	" "
Alsyke .....	.30	" "
Alfalfa .....	.20	" "
Crimson .....	.20	" "
White Dutch.....	.50	" "
Sweet Clover.....	.25	" "

GRASS SEEDS

	Per Lb.	Per Bu.
Timothy	\$0.10	Market price
Kentucky Blue Grass.....	.20	" "
Orchard Grass.....	.25	" "
Perennial Rye Grass.....	.15	" "
Red Top Fancy.....	.40	" "
Red Top Unhulled.....	.25	" "

LAWN GRASS

Fancy Mixed, 1-Lb. Pkg.....	\$0.35
Fancy Mixed, 3-Lb. Pkg.....	1.00
Fancy Mixed, 10 Lbs. or more, per Lb.....	.30

SEED GRAIN

	Per Bu.
Barley, Fancy Two Rowed.....	\$2.00
Barley, Six Rowed.....	1.75
Buckwheat, Silver Hull.....	1.25
Buckwheat, Japanese.....	1.25
Spring Rye.....	1.50
Swedish Oats, Regenerated.....	1.00
Speltz	1.25

MILLETS

	Per Lb.	Per Bu.
German	\$0.05	Market price
Common .....	.05	" "
Siberian .....	.05	" "
Japanese .....	.10	" "
Hungarian .....	.05	" "

FIELD AND COW PEAS

	Per Bu.
Canada Field.....	\$2.25
Cow Peas, Mixed.....	2.75
Cow Peas, Whippoorwill.....	3.25
Cow Peas, Michigan Favorite.....	3.00

SOJA BEANS

	Per Bu.
Yellow Hollybrook.....	\$3.00
Northern Grown Nuttall.....	3.00
Northern Grown Black Beauty.....	3.00

SEED CORN

	Per Bu.
Michigan Yellow Dent.....	\$2.00
Michigan White Dent.....	2.00
Pride of the North.....	2.00
Picket Yellow Dent.....	2.50
Dakota Yellow Dent.....	1.50
Early Huron.....	2.00
White Cap Yellow Dent.....	2.00
Wisconsin White Dent.....	2.00
Longfellow Flint.....	2.25
Compton's Early Flint.....	2.25
Sanford's White Flint.....	2.25
Smut Nose.....	2.50

FODDER CORN

	Per Bu.
Genuine Red Cob Ensilage.....	\$1.25
Yellow Dent Fodder.....	1.25
Leaming	1.50
Evergreen Sweet Fodder.....	2.50

MISCELLANEOUS SEEDS

	Per Lb.
Dwarf Essex Rape.....	\$0.08
Spring Vetch.....	.05
Winter Vetch.....	.10

FLOWER SEEDS

	Per pkt.	Per oz.		Per pkt.	Per oz.
Ageratum, Mixed.....	\$0.05	\$0.40	Gourds, Mixed.....	.05	.30
Alyssum, Sweet.....	.05	.30	Gourds, Separate Colors.....	.05	.30
Alyssum, Little Gem.....	.05	.30	Hollyhock, Double Mixed.....	.05	1.00
Antirrhinum or Snapdragon.....	.50	.35	Larkspur, Tall and Dwarf Mixed.....	.05	.30
Aster, Comet Mixed.....	.05	2.00	Marigold, African and French, Mixed	.05	.50
Aster, Separate Colors.....	.05	2.00	Mignonette, Sweet.....	.05	.50
Aster, Victoria Mixed.....	.05	2.00	Moonflower, Blue and White.....	.05	.65
Aster, Paeony Flowered, Mixed.....	.05	2.00	Morning-Glory, Japanese Mixed.....	.05	.30
Balsam, Double Mixed.....	.05	.75	Pansy, Giant Mixed.....	.05	3.00
Balsam, Separate Colors.....	.05	.75	Phlox, Drummond.....	.05	1.00
Bachelor's Button.....	.05	.30	Portulaca, Double.....	.05	3.00
Bellis, Double Daisy.....	.05	2.00	Poppy, Double Mixed.....	.05	.20
Burning Bush or Kochia.....	.05	.35	Salvia Drooping Spikes.....	.05	3.00
Carnation, Mixed.....	.05	1.50	Straw Flower or Helichrysum.....	.05	.50
Carnation, Marguerite.....	.05	1.50	Sunflower, Double California.....	.05	.30
Candytuft, Mixed.....	.05	.30	Verbena, Mixed.....	.05	.75
Candytuft, White.....	.05	.30	Verbena, Separate Colors.....	.05	.75
Castor Beans, Zanzibar.....	.05	.20	Wild Cucumber.....	.05	.20
Canterbury Bell.....	.05	.75	Zinnia, Double Mixed.....	.05	.40
Cobaea Scandens.....	.05	1.00			
Coxcomb, Mixed.....	.05	1.75			
Coleus, Mixed.....	.05	3.00			
Cosmos, Early and Late Flowering.....	.05	.50			
Columbine, Double Mixed.....	.05	.50			
Coreopsis, Mixed.....	.05	.50			
Daisy, Swan River and Shasta.....	.05	2.00			
Four O'clock.....	.05	.30			

	Per pkg.	Oz.	¼ Lb.
Nasturtium, Tall and Dwarf Mixed.....	\$0.05	\$0.25	\$0.80
Sweet Peas, Grandiflora.....	.05	.10	.30
Sweet Peas, Spencer Mixed.....	.10	.25	.75
Sweet Peas, Spencer and Grandiflora Types, Mixed and separate colors.			

POULTRY SUPPLY DEPARTMENT

In connection with our seed department, we carry Poultry Food, Poultry Remedies and Supplies of the HIGHEST STANDARD OF QUALITY. We feel that at the present time we have one of the most COMPLETE POULTRY DEPARTMENTS in Michigan. We aim to carry the HIGH GRADE MERCHANDISE which the poultry raiser of to-day demands. Our prices you will find reasonable and your trade will be sincerely appreciated.

ALFRED J. BROWN SEED CO.

POULTRY FEED

Owing to the fluctuating on the prices of feed we are compelled to simply give a list of goods handled. Upon inquiry we will furnish at once our best prices. Special prices on large orders.

Alfalfa Meal
Beef Meal
Beef Scraps
Blatchfords Calf Meal
Charcoal (all sizes)
Cracked Corn

"Crescent" Chick Feed—A complete grain feed for chicks until eight weeks old.

"Colonial" Developing Feed—Course Chick. A Course grain chick feed to meet requirements of growing chick from time it has outgrown the "Crescent Brand" until large enough for "Globe" Scratch Feed.

Field Peas

"Globe" Egg Mash

"Globe" Scratch Feed—A balanced grain ration, poultry feed for grown fowls.. (Strictly high grade)

Granulated Bone, both poultry and chick size.

Hemp

Kafir-Corn

"King" Pigeon Feed—A carefully mixed balanced ration of sound and sweet grain, and special seed best adapted for Pigeons.

Oats, Hulled

Oats, Steel Cut

Oyster Shells, poultry and chick size.

Mica Grit, poultry and chick size.

Millet

"Sun" Chick Starter—A primary grain feed for baby chicks up to twenty days old.

Sunflower.

PRAIRIE STATE INCUBATORS, HOVERS AND BROODERS

Large Illustrated Catalog on Request.

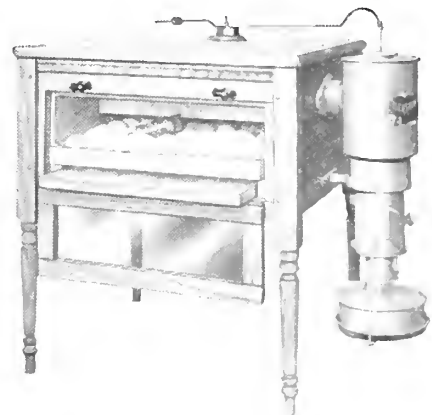


STANDARD TYPE

All Prairie State Incubators are of the hot-air type, insuring long life and durability no tanks to rust out or spring a leak in the middle of a hatch. The outside case, etc., is nicely finished in natural wood, unstained. The space between the inner and outer case is insulated with $2\frac{1}{4}$ inches of cotton batting, 3 inches on top. The heating system is a combination of radiant heat on the top of machine with the diffusive system of ventilation. In this respect our machine differs from all others upon the market. No diffusion screens, with their faulty distribution, are used. We have the most uniform distribution of heat of any incubator made, and we except none.

VENTILATION.

To develop the growing germ strong in vitality requires an almost unlimited amount of pure, fresh air. Ventilation in the Prairie State is two or three

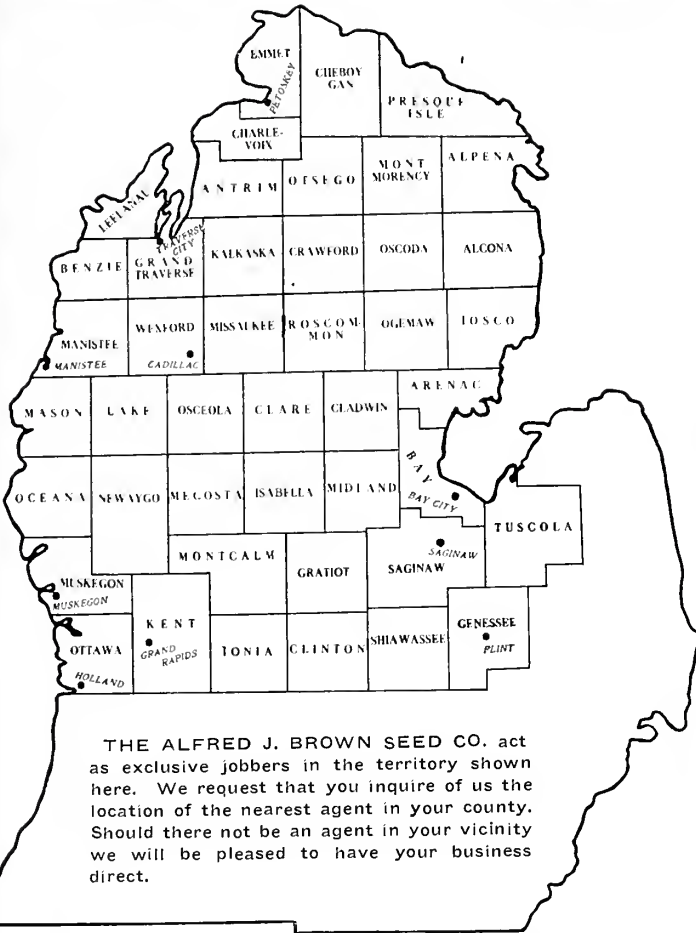


Keystone Incubators. 60 egg capacity, \$8.00. 100 egg capacity, \$12.00.

times as great as in any other machine, but does not pass through the eggs. it passes over the eggs. The eggs are ventilated by diffusion perfectly, but are not dried.

MOISTURE.

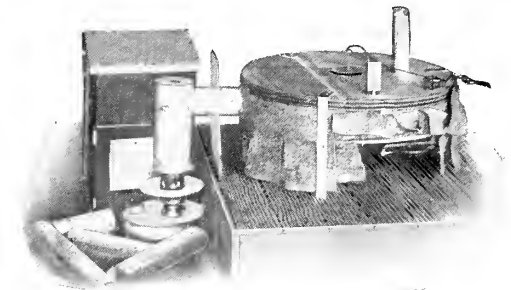
Did you ever notice the hen that steals her nest on the ground? That's natural incubation. And she usually hatches every egg. don't she? We've copied her. We use a wet sand tray, covering the entire bottom of the machine in close proximity to the eggs, thus furnishing the proper amount of moisture and reducing the evaporation from the eggs to the same per cent. (9 to 11 per cent.) as under a hen. This insures chicks full of vitality—chicks that live—just like hen hatched chicks. Non-moisture machines hatch weak, small chicks, of low vitality, hence the heavy death loss during the first two weeks.



THE ALFRED J. BROWN SEED CO. act as exclusive jobbers in the territory shown here. We request that you inquire of us the location of the nearest agent in your county. Should there not be an agent in your vicinity we will be pleased to have your business direct.



NO. 2 COLONY BROODER



UNIVERSAL HOVER

PRICE LIST

No Goods Shipped C. O. D. unless one-half the amount accompanies the order.

PRAIRIE STATE INCUBATORS

Series A No. 1, 150 eggs 150-lbs. crated	.....\$22.50
Series A No. 2, 240 hen eggs, 225-lbs. crated	.... 32.00
Series A No. 3, 390 hen eggs, 325-lbs. crated	.... 38.00
Series B No. 2, 180-200 hen eggs; 185-lbs. crated	..\$27.00
Series B No. 3, 270-300 hen eggs; 235-lbs. crated	. 35.00
Series B No. 4, 360-400 hen eggs; 285-lbs. crated	. 40.00

KEYSTONE SERIES

No. 0 Keystone, 60 hen eggs, 60-lbs. crated	....\$ 9.00
No. 1 Keystone, 100 hen eggs, 80-lbs. crated	.... 12.00

UNIVERSAL HOVER

Complete Hover for outdoor use with Lamp Case, 50 lbs. crated	.....\$7.00
Complete Hover for outdoor use, with Regulator, 50 lbs. crated	..... 8.00
Complete Hover for indoor use, no Lamp Case, 30 lbs. boxed	..... 6.00
Complete Hover for indoor use, with Regulator, 30 lbs. boxed	..... 7.00

PRAIRIE STATE PORTABLE HOVER

No. 1, capacity 65-100 chicks, 50 lbs. crated	\$8.50
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COMBINATION COLONY HOUSE BROODERS

No. 1—(Outdoor), weight, crated, 300 lbs.\$20.00
No. 2—(Outdoor), weight, crated, 208 lbs.	.... 16.00
No. 3—(Outdoor), weight, crated, 150 lbs.	.... 12.00
Heat regulator attached to any of the above brooders, \$1.00 extra.	

EXTRAS

No. 1...Sun Hinge Burner, using 1/2-inch wick, each, postpaid	.....\$0.25
No. 2. Sun Hinge Burner, using 1-inch wick, each, postpaid	..... .35
No. 3. Sun Hinge Burner, using 1 1/2-inch wick, each, postpaid	..... .50
No. 1 and 2 Wicks, per dozen postpaid	..... .15
No. 3 Wicks, per dozen, postpaid	..... .25

INCUBATOR LAMPS

Shipped by express at the expense of purchaser.

No. 1 Lamp, weight 14 oz., capacity 1 3/4 pts., takes No. 1 burner, takes 5/8-inch wick. Used in both sizes of Keystone Incubators. Price, with burner	.....\$0.60
No. 2 Incubator Lamp, takes No. 2 burner, uses 1-inch wick, weighs 14 oz., capacity 2 3/4 pts. Used in No. 1 Series A Incubator. Price, with burner	..... 0.65
No. 2 Brooder Lamp, takes No. 2 burner, weighs 16 oz., capacity 3 pts. Used in all sizes colony house brooders, Universal and Portable Hovers. Price, with burner	.. 0.65
No. 3 Incubator Lamp, weight 19 oz., capacity 4 pts., takes No. 3 burner, uses 1 1/2-inch wick, for Nos. 2, 3 and 4 Incubators, price, with burner	..... 0.75

For full description of the entire line write for large Illustrated Catalog sent free upon request.

Conkey's Poultry Remedies



CONKEY'S ROUP REMEDY is a scientifically prepared medicine. Coming in contact with the membranes of the throat and mouth, the seat of the disease, it kills the germs which are so rapidly multiplying. It is quickly taken up by the system and, being a strong tonic and blood purifier, it cleanses the blood, builds up the system and assists nature in every possible manner to throw off the disease.

Price, small size, 50c, post paid; large size, \$1.00, post paid.

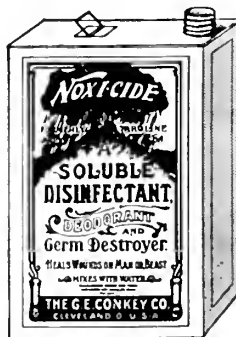
CONKEY'S LAYING TONIC—For the hen to lay the greatest number of eggs, her health must be kept in perfect condition and the egg-producing organs kept free from irritation and disease. There have been put upon the market many so-called egg producers which are irritants, in themselves, while others are simply frauds, producing no effect whatever, and having no value except, perhaps, as foods for which you are paying ridiculous prices.



Price, 1½ lb., 25c; post paid, 50c; 3¼ lb., 50c; express paid, 75c.

PRICE LIST

	Freight Express Postpaid
Blackhead Remedy	50
Bronchitis Remedy	50
Chicken Pox Remedy	55
Cholera Remedy	25
Cholera Remedy	50
Flea Salve	30
Gape Remedy	60
Head Lice Ointment	10
Head Lice Ointment	25
Healing Salve	25
Laying Tonic	25
Laying Tonic	50
Laying Tonic	1.00
Laying Tonic	1.60
Laying Tonic	3.00
Lice Liquid	35
Lice Liquid	60
Lice Liquid	1.00
Lice Powder	25
Lice Powder	50
Lice Powder	1.00
Lice Powder	3.00
Limber Neck Remedy	55



CONKEY'S CHICK STARTER—Consists of cracked grain, and specially prepared with medicine to insure the health of the baby chick until old enough to feed on coarser grain.

Price, 10c and 25c per pkg.
Price, post paid, 15c and 35c per pkg.

PRICE LIST

	Freight Express Postpaid
Noxicide	35
Noxicide	60
Noxicide	90
Noxicide	1.50
Poultry Laxative	25
Poultry Tonic	25
Poultry Worm Remedy	50
Rheumatic Remedy	55
Roup Remedy	50
Roup Remedy	1.00
Scaly Leg Remedy	55
Sulphur Candles	10
Sulphur Candles, 3 for	25
White Diarrhoea	25
White Diarrhoea	50

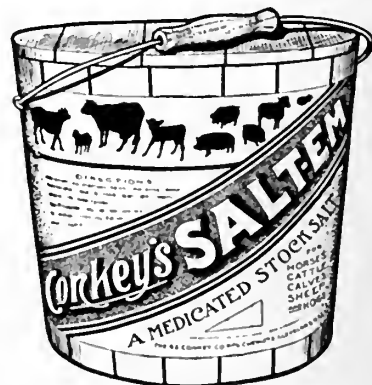
STOCK REMEDIES

SALT-EM

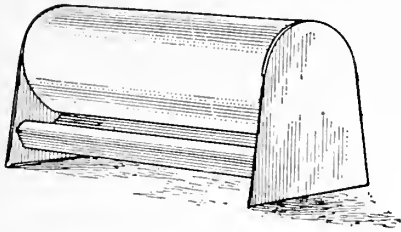
This new remedy keeps stock in proper condition. Insures them against worms, off feed diseases of various kinds. Send for special booklet.

	Freight paid
10 lb. pails	75
20 lb. pails	1.25
40 lb. pails	2.25
100 lb. bbls.	5.00

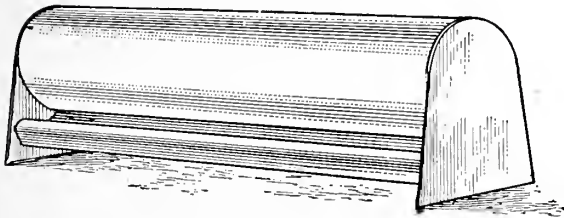
	Postpaid
Absorbent Remedy	1.00
Bag Ointment	25
Eye Lotion	50
Gali Salve	25
Heave Remedy	1.00
Hoof Remedy	50
Liniment	50
Pain Lotion	50
Stock Distemper	50
Stock Vigor	25
Stock Vigor	50



POULTRY SUPPLIES

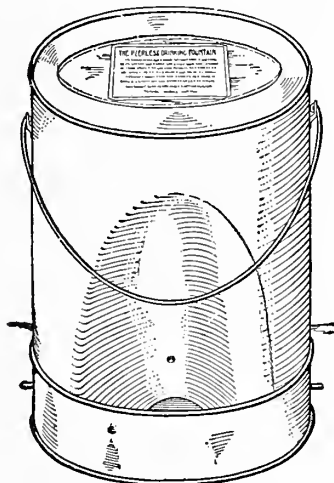


9 inch Hub Chicken Feeder



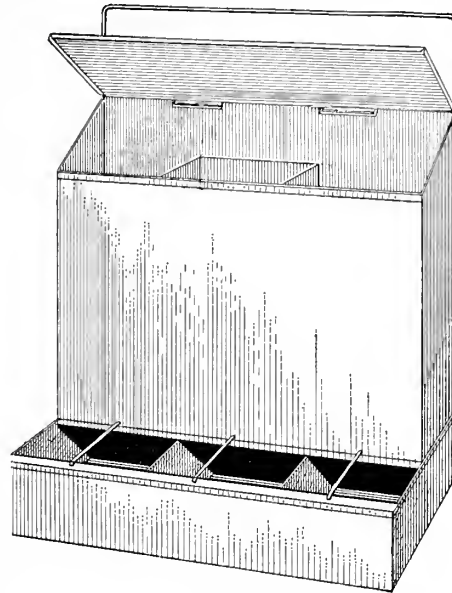
15 inch Hub Chicken Feeder

Is sanitary, keeps the feed clean and dry. Chickens cannot get into it, and cannot waste the feed. It will pay to use the Hub Feeder for small chickens. Chicken feed costs money. The Hub Feeder saves chicken feed. At night turn the feeder over backwards until face down and nothing can get into it. 9 inch feeder, 35c; 15 inch feeder, 50c.



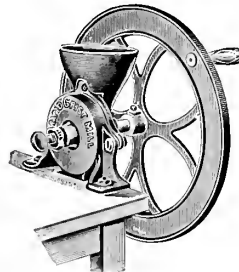
1-5-10 Quart Peerless Drinking Fountain

Keeps water fresh. Very easy to adjust. Price, 1 quart, 30c; 5 quarts, 60c; 10 quarts, 85c.



1-2-3 Poultry Feeder

For Dry Mash, Scraps, Shells, Grit, Charcoal or any poultry feed. When used for one kind of feed only take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, shells and grit, put separator in the middle and you have three separate feeders. Price, 75c. Small size, 50c.



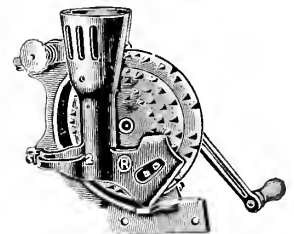
Rapid Grist Mill

Is needed in every home. Finished in red and gold. Weight 22 lbs. Price, \$2.25.



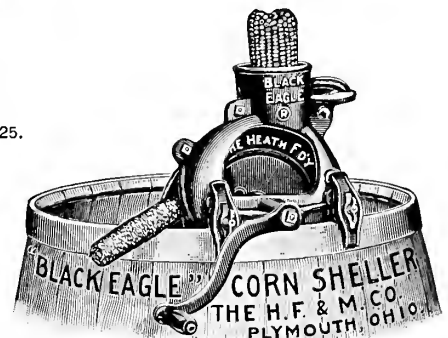
Peerless Combination for Winter Use

The best winter 5 quart fountain heater, will not allow water to freeze in coldest weather. Price, complete, \$1.50.

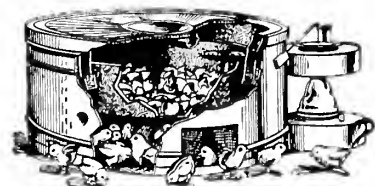


Corn Sheller


With Pop Corn Attachment Price, \$1.00.



Black Eagle Corn Sheller Price, \$1.50.



Simplicity Combination Incubator and Brooder
50 egg capacity. Galvanized \$7.50. Copper \$8.50.



A Scientific Triumph!

LICE KILLER and NEST EGGS

— COMBINED IN ONE —

Effective Lasting Not Expensive

Superior to any other in Form, Size, Appearance and every way.

They look exactly like natural Plymouth Rock eggs and are excellent for laying hens.

Price, each, 5c. Per doz., 50c.

Insecticides and Spraying Material

Tree Tanglefoot

Lime and Sulphur



Tanglefoot prevents insects from crawling up the trees. Price, 1 lb. can, 30c; express paid, 60c; 3 lb. can, 85c; express paid, \$1.20; 10 lb. can, \$2.65; express paid, \$3.00. A band of 3 to 4 inches should be applied and one pound will protect 15 to 25 trees according to size.

Bug Death



Pat. March 16 and Nov. 9, 1897.

PRICE LIST.

One pound package, 15c. Three pound package, 35c. Five pound package, 50c. 12 1/2 pound package, \$1.00.



Perforated top Carton for small gardens, dusting Fowls, Dogs or Cats.

Used from Ocean to Ocean. A light composite, fine powder, easily distributed either by duster, bellows, or in water by spraying. Thoroughly reliable in killing Currant Worms, Potato Bugs, Cabbage Worms, Chicken Lice, Slugs, Sow Bugs, etc., and it is also strongly impregnated with fungicides. Packed in barrels of varying weight, but 8 bbls., average a ton. Prices 1 lb. can, 15c; post paid, 35c; 5 lb. pkg., 40c; express paid, 75c.

Paris Green

250 lb. kegs, per lb. 15
100 lb. kegs, per lb. 16
14 lb. 28 lb. and 56 lb. kits, per lb. 20

2 and 5 lb. pkgs., per lb. 22
1 lb. pkgs., each 25
1/2 lb. pkgs., each 15
1/4 lb. pkgs., each 10

Per bbl. of 50 gallons, \$7.50. (Refund of \$1.00 for empty bbl.)
Per qt., 20c; per gal., 50c; per 5 gal., \$1.50, including can.

Arsenate of Lead

Pruning Compound, per quart, 35c.
100 lb. kegs \$10.00 5 lb. cans85
50 lb. kegs 5.50 2 lb. cans40
25 lb. kegs 3.25 1 lb. can25

Dry Arsenate of Lead

New process. Write for pamphlet.

1 lb. \$.40 25 lb. 7.00
6 lb. 2.00 50 lb. 12.50
12 1/2 lb. 3.75

The "Kant-Clog" Sprayer

A slight pressure of thumb starts the spray. Remove it and the spray stops instantly.

The "Kant-Clog" is the only nozzle that can be successfully cleaned without stopping the spray or removing nozzle from tree. The first and only nozzle made giving both flat and round sprays or solid streams.

Price, with galvanized steel body, \$5.00; with polished Brass Body, \$6.50.



A New Spray and Force Pump

Farmers with an ordinary amount of spraying put a barrel on their wagon, set this pump in and spray their trees as effectively as their neighbor who uses an outfit weighing and costing five times as much.

Will throw two solid continuous streams, one flat spray and one fine round spray. Has automatic mixer to keep solution stirred, pleases everybody and will last a lifetime.

Price of pump complete, as shown in cut, \$3.50.

Junior No. 5.

The Acre-an-Hour Sifter (patented) is light, simple and durable. It is different than any other arrangement for distributing Bug Death and all dry powders. It covers a large or small plant or area at will of operator and is rapid, at the same time economical. Price, 75c.



The most practical and best selling implement for applying Bug Death and all powders to plants. Price, 25c.

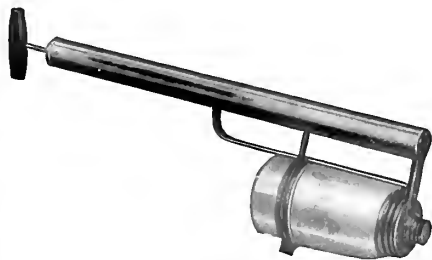
Lowell Sprayers

LOWELL GLASS TANK SPRAYER

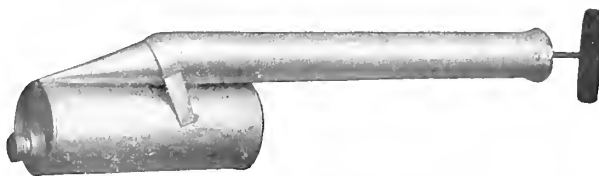
No corks to lose out — they have a screw cap where jar is filled.

A perfectly DRY PUMP—when plunger is drawn back no solution is sucked back into pump cylinder; this leaves VALVES always DRY and PLIABLE and ready for use. Pump cylinder being six inches longer than most other makes allows operator to stand up straight and gives no backache. Will spray up as well as down.

Solution tank is a one-quart Mason Glass Fruit Jar, which is easily replaced if broken. Price, 75c.



ASPINWALL SPRAYER



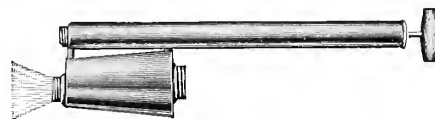
Tin. Price, 50c.

LOWELL BLOW SPRAYER

In some instances potato growers, stock and poultry raisers prefer to use Paris Green and disinfectants in powder form mixed with dry plaster.

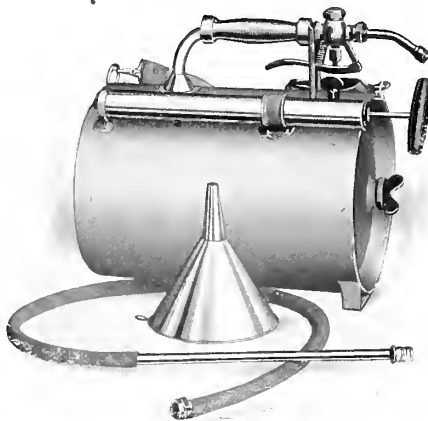
To meet this demand the Lowell Blow Powder Sprayer is especially constructed, and is without exception the most popular machine of its class on the market. The Ball Valve arrangement is so positive in its action that it is impossible to draw any powder back into the pump cylinder or in contact with the pump valve, water pressure before leaving our factory.

Ball Valve in the end of the pump cylinder furnishes the intake of air and is positive in its action. The powder can have a two inch screw cap opening in back for filling and by our double screen arrangement it is impossible for the machine to clog when powder is dry. The powder can hold one quart and the sprayer has an aluminum finish, giving it an attractive appearance. Price, 65c.



Same general description given our No. (101-A) Glass Tank Sprayer applies to this Sprayer, with exception that it does not have the can screw for filling, it being necessary to remove jar to fill. Made in tin only. Price, retail, 60c each.

Lowell Fountain Compressed Air Sprayer



Patented December 3, 1901

Note these exclusive points:

1. It is devoid of complex or intricate parts.
2. It is both automatic and positive in its action.
3. One charge is sufficient to expel entire contents.
4. Each sprayer is thoroughly tested with both air and water pressure before leaving our factory.
5. Having convex heads entire contents can be drained from machine, leaving it perfectly dry when not in use.
6. Heads after being seamed and riveted are dipped into molten solder, making it absolutely air tight and the strongest Air Pressure Sprayer made—standing five times the air pressure necessary to operate.

Tree Attachment, consisting of three feet of $\frac{3}{8}$ inch 3-ply C. I. Rubber Tubing with spraying nozzle one foot long, for small tree and shrub spraying; Spray Crook nozzle three inches long for potato spraying; Funnel with brass wire strainer cloth for filling, and shoulder strap for carrying furnished with each machine.

Capacity of tank, three gallons. Material, brass and galvanized steel. Finish, Aluminum. Price, galvanized steel, \$5.00; brass, \$7.00.

LOWELL SPECIAL SPRAY

Lowell Special Sprayer is a Single Tube Tin Sprayer. The air chamber measures $14\frac{1}{2}$ inches in length by $1\frac{3}{4}$ inches in diameter. Sprayer is fitted with a $\frac{1}{4}$ inch steel plunger rod; special type plunger.

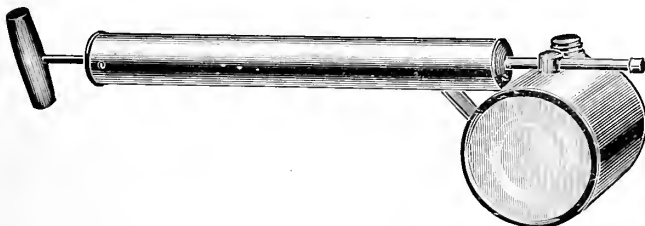
The special arrangement of the spraying tube is such that it thoroughly breaks up or atomizes all oils and solutions into a fine mist-like spray which penetrates all cracks and crevices. The sprayer is adapted for all kinds of general spraying and is used very extensively for spraying disinfectants, etc. Price, 50c.

The Lowell Grand Sprayer has an air chamber in the end of pump cylinder which prevents any moisture from the solution tank being drawn back on the valves. Instead of an air chamber extending from the pump to the solution tank, as in our Glass Tank Sprayer, the Grand is so constructed, with its tapering form of tank, as to allow the use of two short, straight brass solution or spraying tubes to extend upward, connecting with the outlet of the pump direct, thus directing the spray from the end of the pump cylinder instead of solution tank.

The pump cylinder being six inches longer than most other makes allows operator to stand up straight and direct spray at any desired angle giving better results with less labor than with any other make of hand machine. No corks to lose out. It has a screw cap where solution tank is filled. Capacity of tank, one quart. Strong, durable and satisfactory. It is a Trade Maker. Aluminum finish. Price, 60c.



Lowell Continuous Sprayer



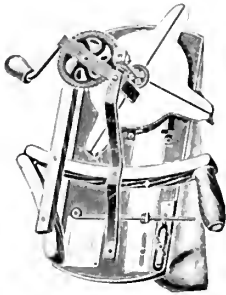
Tin. Price, 65c. Galvanized. Price, 85c.

CLIMAX LAWN WEEDER



Is always ready to grab and hold anything with sufficient grip to remove Root and Branch.
Price, 75c.

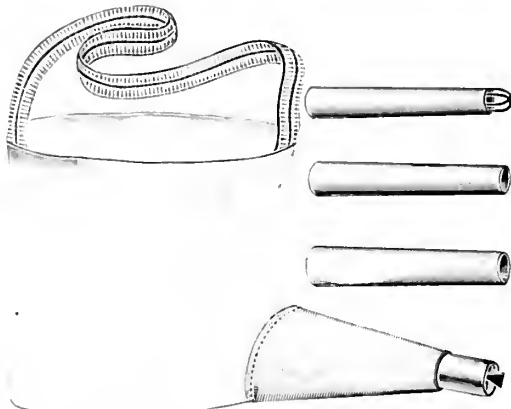
LITTLE GIANT SEEDER NO. 1



This seeder has a steel bow, swinging movement and steel brace, forced feed and pressed tin distributing wheel.

Price, \$1.50.

LITTLE GIANT NO. 3



This Seeder Has Been on the Market
for Many Years

Has a pressed tin four flanged distributing wheel and lathe centered gearings, making it a very easy running seeder. Accurate gauge.

Force Feed!

Steel Frame!

Hand Hold and Shield.

Price, \$1.00.



STERLINGWORTH
CUT WORM KILLER

Used especially for saving tomato plants

Price, 1 lb. cans\$0.25

Price 5 lb. cans1.00

WOOD HANDLE DIBBLES



With iron point 40c
With brass point 75c



ALL IRON DIBBLE

Price, 30c.

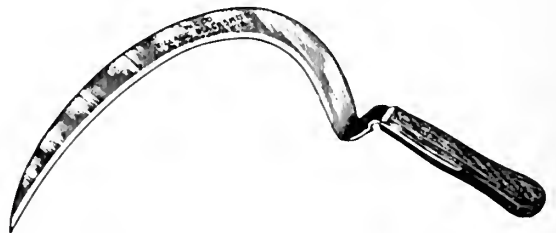


THE NORCROSS CULTIVATOR HOES

These cultivator hoes are very useful for the garden.

5 prong 75c
3 prong 50c
Midget 25c

VILLAGE BLACKSMITH GRASS HOOK NO. 1



Forged steel and bent near the handle, which gives easy action.

Price, 50c.

TRANSPLANTING HALE TROWELS



7 inch blade, price 40c

Quantity of Seeds required to plant an acre or a given amount of ground.

	Per acre		Per acre
Alfalfa	15 to 20 lbs.	Nasturtium 1 oz. to 50 ft. of drill	10 lbs.
Alsike	6 to 8 lbs.	Oats	2½ bu
Asparagus 1 oz. to 200 plants	4 to 5 lbs.	Onion Seed 1 oz. to 200 ft. of drill	4 lbs.
Barley	2 to 2½ bu.	Onion Seed for sets	75 lbs.
Beans, "Dwarf," 1 qt. to 150 ft. of drill ¼ to 1 bu.		Onion Sets 1 qt. to 20 ft. of drill	7 to 8 bu.
Beans, "Pole and Lima," 1 qt. to 200 ft.		Orchard Grass	28 to 35 lbs.
of drill	¼ to ½ bu.	Parsnip 1 oz. to 250 ft. of drill	5 lbs.
Beets 1 oz. to 100 ft. for drill	8 to 10 lbs.	Parsley 1 oz. to 250 ft. of drill	8 lbs.
Blue Grass, Fancy Kentucky	28 to 35 lbs.	Peas, Garden, 1 qt. to 150 ft. of drill	2 bu.
Buckwheat	30 to 40 lbs.	Peas, Canada Field	2½ to 3 bu.
Cabbage 1 oz. to 3,000 plants	6 oz. to ½ lb.	Peas, Cow peas, in drills	½ to ¾ bu.
Cane	30 to 40 lbs.	Peas, Cow peas, broadcast	1 bu.
Carrot 1 oz. to 250 ft. of drill	2½ to 3 lbs.	Pepper, 1 oz. to 1,500 plants	4 ozs.
Cauliflower 1 oz. to 3,000 plants	6 oz. to ½ lb.	Potatoes	6 to 8 bu.
Celery 1 oz. to 10,000 plants	4 to 6 ozs.	Pumpkins 1 qt. to 300 hills	4 qts.
Clover, Medium or Mammoth	10 to 12 lbs.	Radish 1 oz. to 150 ft. of drill	8 lbs.
Clover, Scarlet or Crimson	12 to 15 lbs.	Rape, Dwarf Essex, in drills	2½ to 3 lbs.
Clover, White Dutch	4 to 6 lbs.	Rape, Dwarf Essex, broadcast	5 to 6 lbs.
Corn, field, in hills	6 quarts.	Red Top Solid Seed	10 to 12 lbs.
Corn, for fodder in drills	¾ to 1 bu.	Red Top unhulled	30 to 40 lbs.
Corn, sweet, 1 qt. to 500 hills	8 quarts.	Rutabaga 1 oz. to 200 ft. of drill	1½ to 2 lbs.
Cress 1 oz. to 150 ft. of drill	8 lbs.	Rye	1½ bu
Cucumber 1 oz. to 80 hills	2½ lbs.	Salsify 1 oz. to 60 ft. of drill	8 lbs.
Egg Plant 1 oz. to 2,000 plants	3 ozs.	Spinach 1 oz. to 150 ft. of drill	15 lbs.
Endive 1 oz. to 300 ft. of drill	3 lbs.	Speltz	2 to 2½ bu.
Flax	28 to 30 lbs.	Summer Savory 1 oz. to 500 ft. of drill	2 lbs.
Hungarian Grass	40 to 50 lbs.	Squash, Summer, 1 oz. to 40 hills	2 lbs.
Kale 1 oz. to 3,000 plants	4 ozs.	Squash, Winter, 1 oz. to 10 hills	3 lbs.
Kohl Rabi 1 oz. to 200 ft. of drill	1½ lbs.	Timothy	12 to 15 lbs.
Lawn Grass, 5 lbs. per 1,000 sq. ft.	60 to 80 lbs.	Tomato 1 oz. to 3,000 plants	3 ozs. to ¼ lb.
Lettuce 1 oz. to 250 ft. of drill	3 lbs.	Tobacco 1 oz. to 5,000 plants	2 ozs.
Mangel Wurzel	10 to 12 lbs.	Turnip 1 oz. to 250 ft. of drill	1½ lbs.
Melon, Musk, 1 oz. to 100 hills	2 lbs.	Vetch, Spring	1½ to 2 bu.
Melon, Water, 1 oz. to 25 hills	2½ to 3 lbs.	Vetch, Winter	¾ to 1 bu.
Millet	40 to 50 lbs.	Wheat	1½ to 2 bu.

Number of Plants or Trees to the Acre at given distances.

Dis. apart	No. Plants	Dis. apart	No. Plants	Dis. apart	No. Plants	Dis. apart	No. Plants
½ foot.....	174,240	3 feet by 3 feet	4,840	6 feet.....	1,210	12 feet.....	302
1 foot.....	43,560	4 feet by 1 foot	10,888	7 feet.....	889	15 feet.....	193
1½ feet.....	19,360	4 feet by 2 feet	5,444	8 feet.....	680	18 feet.....	134
2 feet.....	10,890	4 feet by 3 feet	3,629	9 feet.....	578	20 feet.....	108
2½ feet.....	6,969	4 feet by 4 feet	2,722	10 feet.....	435	25 feet.....	69
3 feet by 1 foot	14,580	5 feet by 5 feet	1,742	11 feet.....	360	30 feet.....	49
3 feet by 2 feet	7,260						

Standard Weight of Various Articles.

	per bush		per bush
Apples	48 lbs.	Onions	56 lbs.
Apples, dried	28 "	Peas	60 "
Barley	48 "	Rape	50 "
Beans	60 "	Rye	56 "
Buckwheat	48 "	Red Top Seed	14 "
Broom Corn	46 "	Salt Coarse	50 "
Blue Grass, Kentucky	14 "	Salt, Michigan	56 "
Blue Grass, English	24 "	Sweet Potatoes	56 "
Bran	20 "	Timothy Seed	45 "
Canary Seed	60 "	Turnips	58 "
Castor Beans	46 "	Wheat	60 "
Clover Seed	60 "	Beef and pork, per bbl, net	200 "
Corn, shelled	56 "	Flour, per bbl, net	196 "
Corn, on ear	70 "	Salt, per bbl	280 "
Corn Meal	50 "	Lime, per bbl	220 "
Dried Peaches	28 "	Hay, well settled, per cubic foot	4½ "
Flax Seed	56 "	Corn, on cob, in bin per cubic foot	22 "
Hemp Seed	44 "	Corn, shelled, in bin, per cubic foot	45 "
Hungarian Grass Seed	50 "	Wheat, in bin, per cubic foot	48 "
Irish Potatoes	60 "	Oats, in bin, per cubic foot	25½ "
Millet	50 "	Sand, dry, per cubic foot	95 "
Malt	38 "	Clay, compact, per cubic foot	135 "
Oats	32 "	Seasoned Beech Wood, per cord	5616 "
Orchard Grass	14 "	Seasoned Hickory, per cord	6960 "

